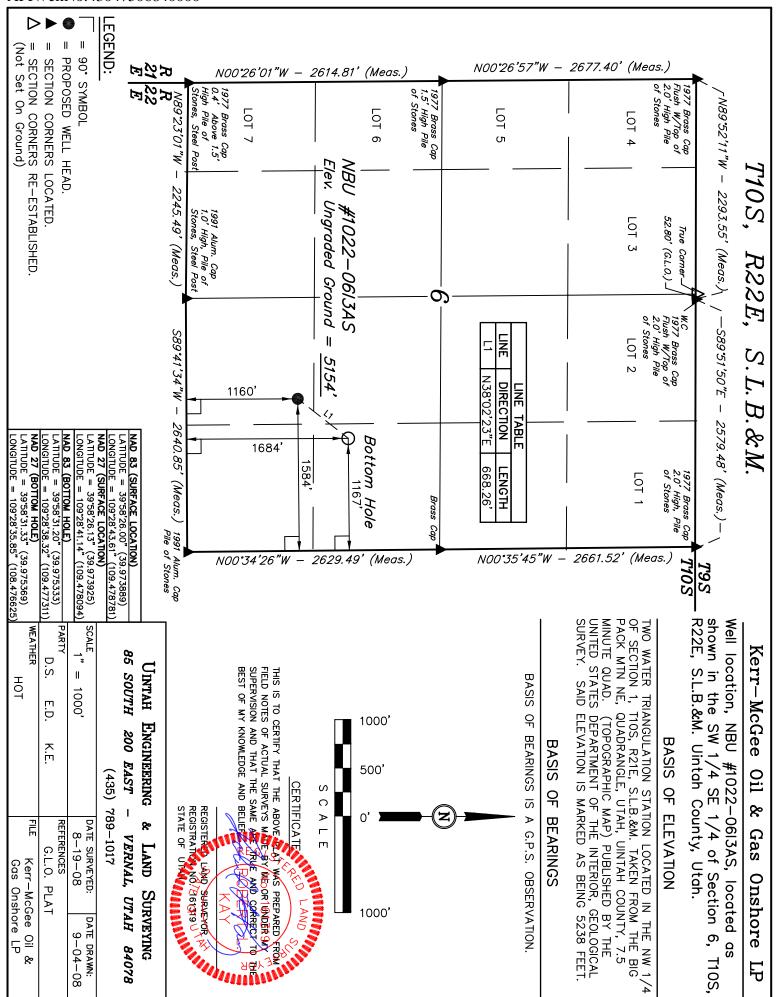
		DEPARTMENT	ATE OF UTAH OF NATURAL RES F OIL, GAS AND I				FOR			
APPLI	CATION FOR	PERMIT TO DRILL	-			1. WELL NAME and	NUMBER NBU 1022-6I3AS			
2. TYPE OF WORK DRILL NEW WELL	REENTER P8	&A WELL (DEEPE	N WELL			3. FIELD OR WILDO	CAT NATURAL BUTTES			
4. TYPE OF WELL Gas We	ell Coalb	oed Methane Well: NO				5. UNIT or COMMU	NITIZATION AGRE	EMENT NAME		
6. NAME OF OPERATOR KERR	R-MCGEE OIL & 0	GAS ONSHORE, L.P.				7. OPERATOR PHO	NE 720 929-6587			
8. ADDRESS OF OPERATOR P.O	. Box 173779, [Denver, CO, 80217		9. OPERATOR E-MAIL mary.mondragon@anadarko.co						
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		11. MINERAL OWNE								
UTU 01195	- 'faa'\	FEDERAL (IND	IAN (STATE (STATE FEE FEDERAL INDIAN STATE 14. SURFACE OWNER PHONE (if box 12 = 'fe						
13. NAME OF SURFACE OWNER (if box 12										
15. ADDRESS OF SURFACE OWNER (if box	12 = 'fee')					16. SURFACE OWN	ER E-MAIL (if box	12 = 'fee')		
17. INDIAN ALLOTTEE OR TRIBE NAME		18. INTEND TO COM MULTIPLE FORMATI		TION FR	гом	19. SLANT				
(if box 12 = 'INDIAN')		YES (Submit C	commingling Applicat	ion) N	10 🔘	VERTICAL DIF	RECTIONAL 📵 H	ORIZONTAL 🗍		
20. LOCATION OF WELL	FC	OOTAGES	QTR-QTR	SE	CTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE	1160 F	SL 1584 FEL	SWSE		6	10.0 S 22.0 E		S		
Top of Uppermost Producing Zone	1684 F	SL 1167 FEL	NESE		6	10.0 S	22.0 E	S		
At Total Depth	1684 F	SL 1167 FEL	NESE		6	10.0 S	22.0 E	S		
21. COUNTY UINTAH		22. DISTANCE TO N	EAREST LEASE LIN	IE (Feet	t)	23. NUMBER OF AC	RES IN DRILLING 578	UNIT		
		25. DISTANCE TO NI (Applied For Drilling		SAME PO	OOL	26. PROPOSED DEPTH MD: 9294 TVD: 9200				
27. ELEVATION - GROUND LEVEL		28. BOND NUMBER		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER I Permit #43-8496						
		Aī	TTACHMENTS							
VERIFY THE FOLLOWING	ARE ATTACH	HED IN ACCORCANG	CE WITH THE U	ГАН ОЗ	IL AND G	AS CONSERVATI	ON GENERAL RU	JLES		
WELL PLAT OR MAP PREPARED BY	LICENSED SUF	RVEYOR OR ENGINEER	R COM	IPLETE	DRILLING	PLAN				
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGRE	EEMENT (IF FEE SURF	ACE) FORI	M 5. IF (OPERATOR	R IS OTHER THAN T	HE LEASE OWNER			
DRILLED)	RECTIONALLY	OR HORIZONTALLY	[✔ ТОРО	OGRAPH	HICAL MAP	•				
NAME Danielle Piernot	T	ITLE Regulatory Analyst	t	PI	HONE 720	929-6156				
SIGNATURE	D	ATE 09/02/2009		EI	MAIL danie	elle.piernot@anadarko	.com			
API NUMBER ASSIGNED 43047506840000	A	PPROVAL	hoogy							
		Permit Mana	ager							

	Proposed Hole, Casing, and Cement										
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)							
Prod	7.875	4.5	0	9294							
Pipe	Grade	Length	Weight								
	Grade I-80 Buttress	9294	11.6			Г					

	Proposed Hole, Casing, and Cement										
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)							
Surf	12.25	9.625	0	2285							
Pipe	Grade	Length	Weight								
	Grade J-55 LT&C	2285	36.0								



Project: Uintah County, UT Site: NBU 1022-60 Pad

Well: NBU 1022-613AS Wellbore: OH Design: Plan #1

Kerr McGee Oil and Gas Onshore LP

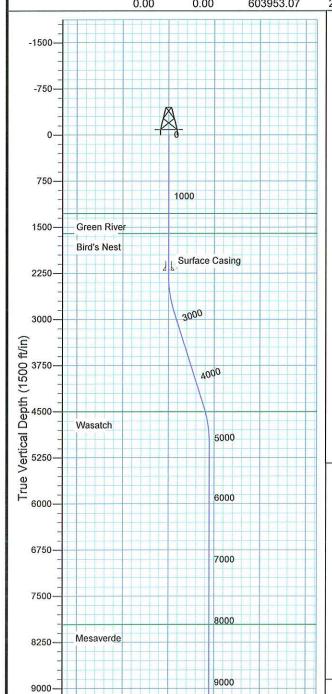
T M

Azimuths to True North Magnetic North: 11.39°

Magnetic Field Strength: 52605.0snT Dip Angle: 65.92° Date: 10/20/2008 Model: IGRF2005-10

WELL DETAILS: NBU 1022-613AS





9294

750

Vertical Section at 38.05° (1500 ft/in)

9750

10500

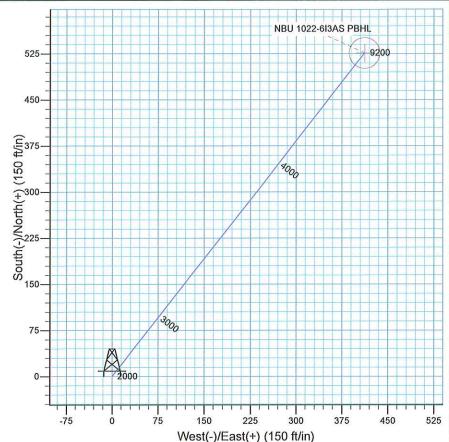
-1500

-750

NBU 1022-613AS PBHL

1500

2250



Plan: Plan #1 (NBU 1022-613AS/OH)

Created By: Julie Cruse Date: 2008-10-20

PROJECT DETAILS: Uintah County, UT

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)

Ellipsoid: Clarke 1866
Zone: Utah Central 4302
Location: Sec 6 T10S R22E
System Datum: Mean Sea Level

Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	
2886.14	17.58	38.05	2876.99	70.27	55.00	3.00	38.05	89.24	
4506.91	17.58	38.05	4422.01	455.86	356.80	0.00	0.00	578.89	
5093.05	0.00	0.00	4999.00	526.13	411.80	3.00	180.00	668.13	
9294.05	0.00	0.00	9200.00	526.13	411.80	0.00	0.00	668.13	NBU 1022-613AS PBHL



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT NBU 1022-60 Pad NBU 1022-613AS OH

Plan: Plan #1

Standard Planning Report

20 October, 2008



Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi User DB

Company:

Kerr McGee Oil and Gas Onshore LP

Project: Site:

Uintah County, UT NBU 1022-60 Pad NBU 1022-6I3AS

Well: Wellbore: Design:

ОН Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well NBU 1022-613AS

GL 5149' & RKB 18' @ 5167.00ft GL 5149' & RKB 18' @ 5167.00ft

True

Minimum Curvature

Project

Uintah County, UT

Map System:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Geo Datum: Map Zone:

Utah Central 4302

System Datum:

Mean Sea Level

Site

NBU 1022-60 Pad, Sec 6 T10S R22E

Site Position: From:

Lat/Long

Northing: Easting:

603,918.07 ft 2,566,613.33 ft

Latitude: Longitude:

39° 58' 25.780 N 109° 28' 40.910 W

Position Uncertainty:

0.00 ft

Slot Radius:

Grid Convergence:

1.30

Well

NBU 1022-6I3AS, 1160' FSL 1584' FEL

Well Position +N/-S +E/-W

0.00 ft 0.00 ft Northing: Easting:

603,953.07 ft 2,566,594.63 ft Latitude: Longitude:

39° 58' 26.130 N 109° 28' 41.140 W

Position Uncertainty

0.00 ft

Wellhead Elevation:

10/20/2008

ft

Ground Level:

65.93

5,149.00 ft

Wellbore

OH

Magnetics

Model Name

IGRF2005-10

Sample Date

Declination (°) 11.39

Dip Angle

Field Strength

52,605

Design

Plan #1

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

0.00

Vertical Section:

Depth From (TVD)

+N/-S (ft)

+E/-W (ft)

Direction

(ft) 0.00

0.00

0.00

(°) 38.05

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,886.14	17.58	38.05	2,876.99	70.27	55.00	3.00	3.00	0.00	38.05	
4,506.91	17.58	38.05	4,422.01	455.86	356.80	0.00	0.00	0.00	0.00	
5,093.05	0.00	0.00	4,999.00	526.13	411.80	3.00	-3.00	0.00	180.00	
9,294.05	0.00	0.00	9,200.00	526.13	411.80	0.00	0.00	0.00	0.00	NBU 1022-613AS PE



Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi User DB

Company:

Kerr McGee Oil and Gas Onshore LP

Project: Site: Well: Uintah County, UT NBU 1022-6O Pad NBU 1022-6I3AS

Wellbore: Design: OH Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well NBU 1022-613AS

GL 5149' & RKB 18' @ 5167.00ft GL 5149' & RKB 18' @ 5167.00ft

True

Minimum Curvature

d Survey									
	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
4 000 00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00							
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,275.00	0.00	0.00	1,275.00	0.00	0.00	0.00	0.00	0.00	0.00
Green River									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00					0.00	0.00	0.00	0.00	0.00
1,603.00	0.00	0.00	1,603.00	0.00	0.00	0.00	0.00	0.00	0.00
Bird's Nest	0.000	727250	100000000					0.00	2.22
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing	g								
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	3.00	38.05	2,399.95	2.06	1.61	2.62	3.00	3.00	0.00
2,500.00	6.00	38.05	2,499.63	8.24	6.45	10.46	3.00	3.00	0.00
2,600.00	9.00	38.05	2,598.77	18.52	14.49	23.51	3.00	3.00	0.00
2,700.00	12.00	38.05	2,697.08	32.87	25.72	41.74	3.00	3.00	0.00
2,800.00	15.00	38.05	2,794.31	51.25	40.11	65.08	3.00	3.00	0.00
2,886.14	17.58	38.05	2,876.99	70.27	55.00	89.24	3.00	3.00	0.00
2,900.00	17.58	38.05	2,890.19	73.57	57.58	93.43	0.00	0.00	0.00
3,000.00	17.58	38.05	2,985.52	97.36	76.20	123.64	0.00	0.00	0.00
3,100.00	17.58	38.05	3,080.85	121.15	94.83	153.85	0.00	0.00	0.00
3,200.00	17.58	38.05	3,176.18	144.94	113.45	184.06	0.00	0.00	0.00
3,300.00	17.58	38.05	3,271.50	168.73	132.07	214.27	0.00	0.00	0.00
3,400.00	17.58	38.05	3,366.83	192.52	150.69	244.48	0.00	0.00	0.00
3,500.00	17.58	38.05	3,462.16	216.31	169.31	274.69	0.00	0.00	0.00
3,600.00	17.58	38.05	3,557.49	240.10	187.93	304.90	0.00	0.00	0.00
3,700.00	17.58	38.05	3,652.81	263.89	206.55	335.11	0.00	0.00	0.00
3,800.00	17.58	38.05	3,748.14	287.68	225.17	365.33	0.00	0.00	0.00
3,900.00	17.58	38.05	3,843.47	311.47	243.79	395.54	0.00	0.00	0.00
4,000.00	17.58	38.05	3,938.79	335.26	262.41	425.75	0.00	0.00	0.00
4,100.00	17.58	38.05	4,034.12	359.05	281.03	455.96	0.00	0.00	0.00
						196 17	0.00	0.00	0.00
4,200.00	17.58	38.05	4,129.45	382.84	299.65	486.17			
4,300.00	17.58	38.05	4,224.78	406.63	318.27	516.38	0.00	0.00	0.00
4,400.00	17.58	38.05	4,320.10	430.42	336.89	546.59	0.00	0.00	0.00
4,500.00	17.58	38.05	4,415.43	454.21	355.51	576.80	0.00	0.00	0.00
4,506.91	17.58	38.05	4,422.01	455.86	356.80	578.89	0.00	0.00	0.00



Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi User DB

Company:

Kerr McGee Oil and Gas Onshore LP

Project: Site: Uintah County, UT NBU 1022-60 Pad NBU 1022-613AS

Well: Wellbore: Design:

OH Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well NBU 1022-613AS

GL 5149' & RKB 18' @ 5167.00ft GL 5149' & RKB 18' @ 5167.00ft

True

Minimum Curvature

ned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
4,587.15 Wasatch	15.18	38.05	4,499.00	473.68	370.75	601.52	3.00	-3.00	0.00
4,600.00	14.79	38.05	4,511.41	476.29	372.79	604.84	3.00	-3.00	0.00
4,700.00	11.79	38.05	4,608.72	494.40	386.96	627.83	3.00	-3.00	0.00
4,800.00	8.79	38.05	4,707.10	508.46	397.97	645.69	3.00	-3.00	0.00
4,900.00	5.79	38.05	4,806.28	518.46	405.79	658.38	3.00	-3.00	0.00
5,000.00	2.79	38.05	4,905.99	524.35	410.41	665.86	3.00	-3.00	0.00
5,093.05	0.00	0.00	4,999.00	526.13	411.80	668.13	3.00	-3.00	0.00
5,100.00	0.00	0.00	5,005.95	526.13	411.80	668.13	0.00	0.00	0.00
5,200.00	0.00	0.00	5,105.95	526.13	411.80	668.13	0.00	0.00	0.00
5,300.00	0.00	0.00	5,205.95	526.13	411.80	668.13	0.00	0.00	0.00
5,400.00	0.00	0.00	5,305.95	526.13	411.80	668.13	0.00	0.00	0.00
5,500.00	0.00	0.00	5,405.95	526.13	411.80	668.13	0.00	0.00	0.00
5,600.00	0.00	0.00	5,505,95	526.13	411.80	668.13	0.00	0.00	0.00
5,700.00	0.00	0.00	5,605.95	526.13	411.80	668.13	0.00	0.00	0.00
5,800.00	0.00	0.00	5,705.95	526.13	411.80	668.13	0.00	0.00	0.00
5,900.00	0.00	0.00	5,805.95	526,13	411.80	668.13	0.00	0.00	0.00
6,000.00	0.00	0.00	5,905.95	526.13	411.80	668.13	0.00	0.00	0.00
6,100.00	0.00	0.00	6,005.95	526.13	411.80	668.13	0.00	0.00	0.00
6,200.00	0.00	0.00	6,105.95	526.13	411.80	668.13	0.00	0.00	0.00
6,300.00	0.00	0.00	6,205.95	526.13	411.80	668.13	0.00	0.00	0.00
6,400.00	0.00	0.00	6,305.95	526.13	411.80	668.13	0.00	0.00	0.00
6,500.00	0.00	0.00	6,405.95	526.13	411.80	668.13	0.00	0.00	0.00
6,600.00	0.00	0.00	6,505.95	526.13	411.80	668.13	0.00	0.00	0.00
6,700.00	0.00	0.00	6,605.95	526.13	411.80	668.13	0.00	0.00	0.00
6,800.00	0.00	0.00	6,705.95	526.13	411.80	668.13	0.00	0.00	0.00
6,900.00	0.00	0.00	6,805.95	526.13	411.80	668.13	0.00	0.00	0.00
7,000.00	0.00	0.00	6,905.95	526.13	411.80	668.13	0.00	0.00	0.00
7,100.00	0.00	0.00	7,005.95	526.13	411.80	668.13	0.00	0.00	0.00
7,200.00	0.00	0.00	7,105.95	526.13	411.80	668.13	0.00	0.00	0.00
7,300.00	0.00	0.00	7,205.95	526.13	411.80	668.13	0.00	0.00	0.00
7,400.00	0.00	0.00	7,305.95	526.13	411.80	668.13	0.00	0.00	0.00
7,500.00	0.00	0.00	7,405.95	526.13	411.80	668.13	0.00	0.00	0.00
7,600.00	0.00	0.00	7,505.95	526.13	411.80	668.13	0.00	0.00	0.00
7,700.00	0.00	0.00	7,605.95	526.13	411.80	668.13	0.00	0.00	0.00
7,800.00	0.00	0.00	7,705.95	526.13	411.80	668.13	0.00	0.00	0.00
7,900.00	0.00	0.00	7,805.95	526.13	411.80	668.13	0.00	0.00	0.00
8,000.00	0.00	0.00	7,905.95	526.13	411.80	668.13	0.00	0.00	0.00
8,056.05	0.00	0.00	7,962.00	526.13	411.80	668.13	0.00	0.00	0.00
Mesaverde									
8,100.00	0.00	0.00	8,005.95	526.13	411.80	668.13	0.00	0.00	0.00
8,200.00	0.00	0.00	8,105.95	526.13	411.80	668.13	0.00	0.00	0.00
8,300.00	0.00	0.00	8,205.95	526.13	411.80	668.13	0.00	0.00	0.00
8,400.00	0.00	0.00	8,305.95	526.13	411.80	668.13	0.00	0.00	0.00
8,500.00	0.00	0.00	8,405.95	526.13	411.80	668.13	0.00	0.00	0.00
8,600.00	0.00	0.00	8,505.95	526.13	411.80	668.13	0.00	0.00	0.00
8,700.00	0.00	0.00	8,605.95	526.13	411.80	668.13	0.00	0.00	0.00
8,800.00	0.00	0.00	8,705.95	526.13	411.80	668.13	0.00	0.00	0.00
8,900.00	0.00	0.00	8,805.95	526.13	411.80	668.13	0.00	0.00	0.00
9,000.00	0.00	0.00	8,905.95	526.13	411.80	668.13	0.00	0.00	0.00
9,100.00	0.00	0.00	9,005.95	526.13	411.80	668.13	0.00	0.00	0.00
9,200.00	0.00	0.00	9,105.95	526.13	411.80	668.13	0.00	0.00	0.00
9,294.05	0.00	0.00	9,200.00	526.13	411.80	668.13	0.00	0.00	0.00

'APIWellNo:43047506840000'



Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi User DB

Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT Site: NBU 1022-60 Pad NBU 1022-613AS Well:

Wellbore: Design:

ОН Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:** Well NBU 1022-613AS

GL 5149' & RKB 18' @ 5167.00ft GL 5149' & RKB 18' @ 5167.00ft

True

Minimum Curvature

Targets									
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 1022-6l3AS PBHL - plan hits target cen - Circle (radius 25.00		0.00	9,200.00	526.13	411.80	604,488.37	2,566,994.44	39° 58′ 31.330 N	109° 28' 35.850 V

Casing Points						
	Measured	Vertical			Casing	Hole
	Depth	Depth			Diameter	Diameter
	(ft)	(ft)		Name	(in)	(in)
	2,200.00	2,200.00	Surface Casing		9.625	13.500

ormations							
	Measured Depth (ft)	Vertical Depth (ft)		Name	Lithology	Dip (°)	Dip Direction (°)
	1,275.00	1,275.00	Green River			0.00	
	1,603.00	1,603.00	Bird's Nest			0.00	
	4,587.15	4,499.00	Wasatch			0.00	
	8,056.05	7,962.00	Mesaverde			0.00	

NBU 1022-6I3AS

Pad: NBU 1022-60 Surface: 1,160' FSL 1,584' FEL (SW/4SE/4) BHL: 1,684' FSL 1,167' FEL (NE/4SE/4) Sec. 6 T10S R22E

> Uintah, Utah Mineral Lease: UTU 01195

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. – 2. Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	Resource
Uinta	0 – Surface	
Green River	1,275'	
Birds Nest	1,603'	Water
Mahogany	2,081'	Water
Wasatch	4,499'	Gas
Mesaverde	7,064'	Gas
MVU2	7,962'	Gas
MVL1	8,595'	Gas
TVD	9,200'	
TD	9,294'	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program.

4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program.

Evaluation Program:

Please refer to the attached Drilling Program.

Drilling Program

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9,200' TVD, approximately equals 5,493 psi (calculated at 0.60 psi/foot).

Maximum anticipated surface pressure equals approximately 3,469 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

NBU 1022-6I3AS

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). The air rig operation utilizes a 5M BOPE when drilling. This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

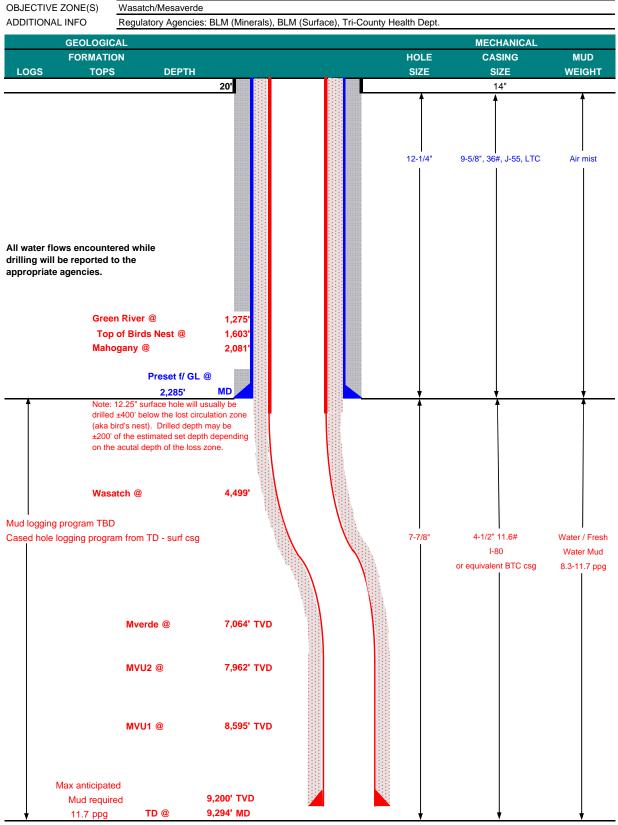
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP <u>DRILLING PROGRAM</u>

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE August 19, 2009 **NBU 1022-613AS** WELL NAME 9,200' TVD 9,294' MD FINISHED ELEVATION FIELD Natural Buttes **COUNTY** Uintah STATE Utah 5,149' SURFACE LOCATION SW/4 SE/4 1,160' FSL 1,584' FEL Sec 6 T 10S R 22E Latitude: 39.973889 Longitude: -109.478781 **NAD 83** BTM HOLE LOCATION NE/4 SE/4 1,684' FSL 1,167' FEL Sec 6 T 10S R 22E Latitude: 39.975333 -109.477311 NAD 83 Longitude: Wasatch/Mesaverde





KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

								I	DESIGN FACT	ORS
	SIZE	INTI	ERVAL	_	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	C	-40'							
								3,520	2,020	453,000
SURFACE	9-5/8"	0	to	2,285	36.00	J-55	LTC	0.98	1.89	7.01
								7,780	6,350	278,000
PRODUCTION	4-1/2"	0	to	9,294	11.60	I-80	BTC	2.18	1.13	2.95

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.7 ppg) 0.22 psi/ft = gradient for partially evac wellbore (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3,469 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 11.7 ppg) 0.6 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 5,493 psi

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD		
SURFACE LEAD	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18		
Option 1		+ 0.25 pps flocele						
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18		
		+ 2% CaCl + 0.25 pps flocele						
		Premium cmt + 2% CaCl						
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized						
Option 2 LEAD	1,785'	65/35 Poz + 6% Gel + 10 pps gilsonite	420	35%	12.60	1.81		
		+ 0.25 pps Flocele + 3% salt BWOW						
TAIL	500'	Premium cmt + 2% CaCl	180	35%	15.60	1.18		
		+ 0.25 pps flocele						
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18		
PRODUCTION LEAD	3,994'	Premium Lite II + 3% KCI + 0.25 pps	380	40%	11.00	3.38		
		celloflake + 5 pps gilsonite + 10% gel						
		+ 0.5% extender						
TAIL	5,300'	50/50 Poz/G + 10% salt + 2% gel	1,300	40%	14.30	1.31		
		+ 0.1% R-3						

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe					
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.					

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

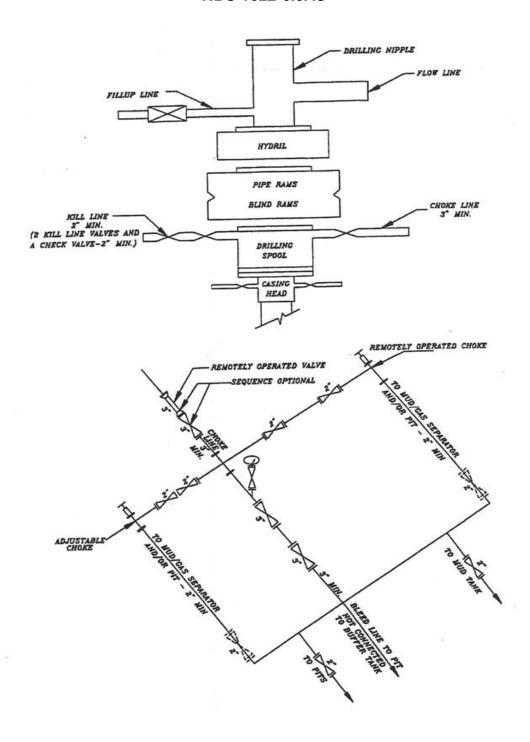
BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.	
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.	

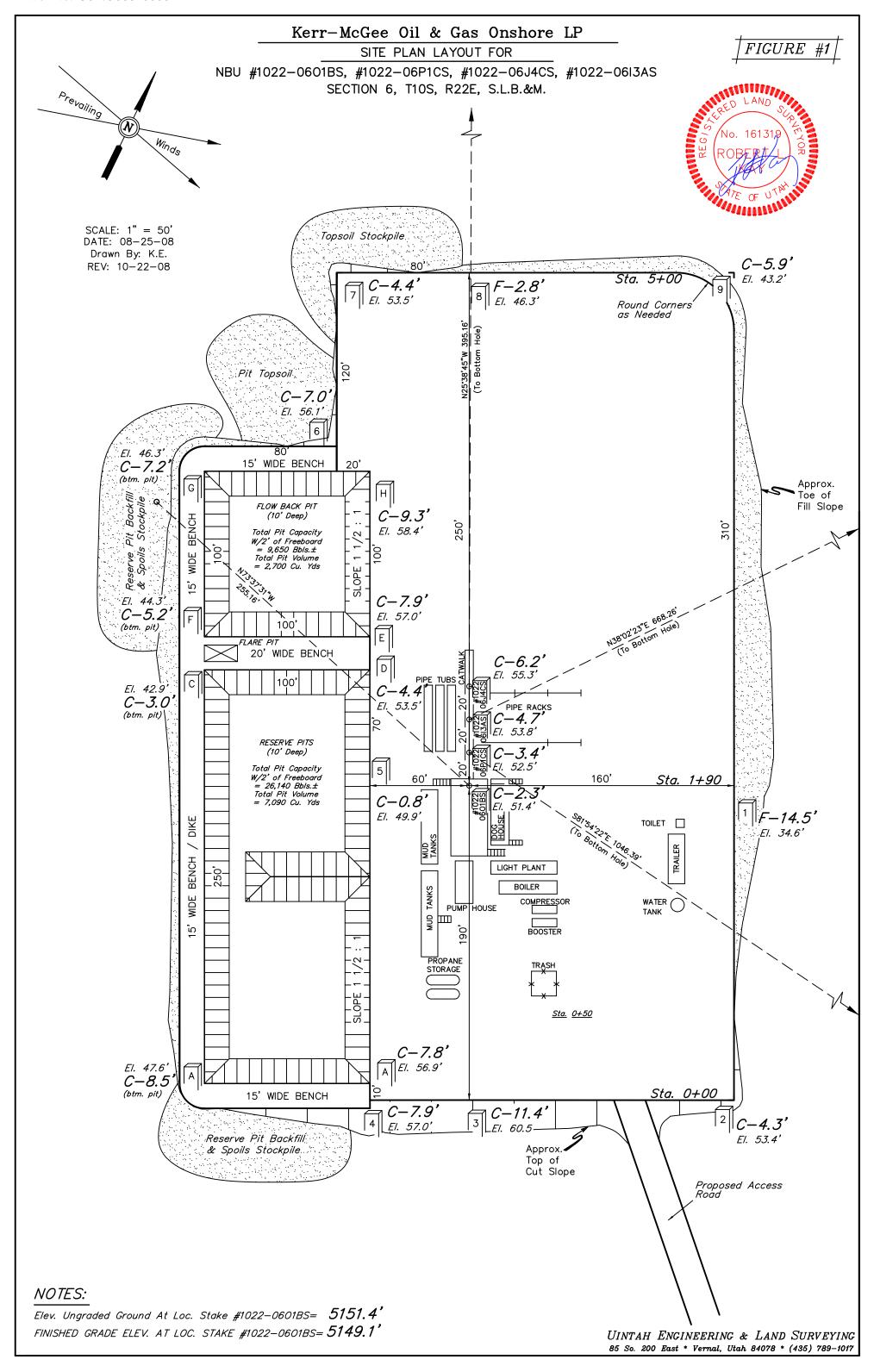
	Most rigs have PVT System for	mud monitoring. If no PVT is available, visual monitoring wil		
DRILLING	ENGINEER:		DATE:	
		John Huycke / Emile Goodwin	-	
DRILLING	SUPERINTENDENT:		DATE:	
		John Merkel / Lovel Young	•	

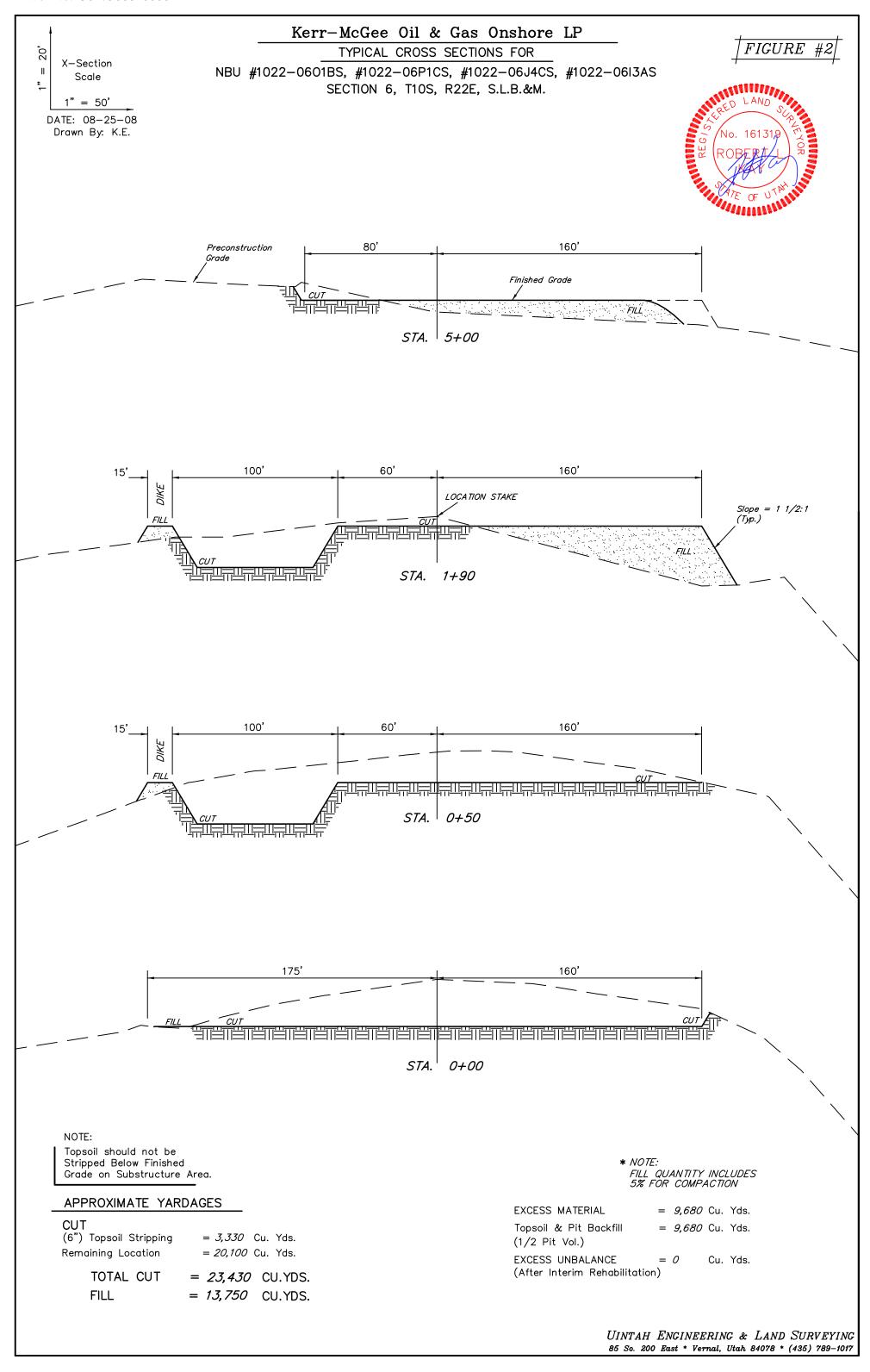
^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

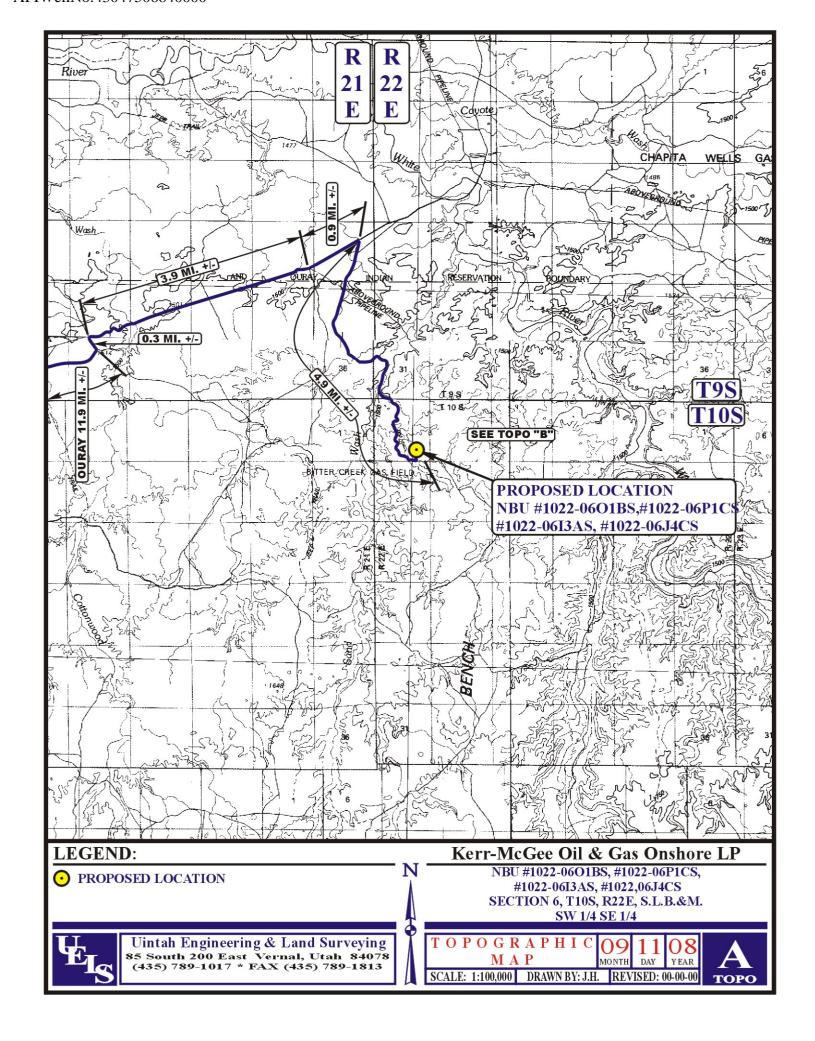
EXHIBIT A NBU 1022-613AS

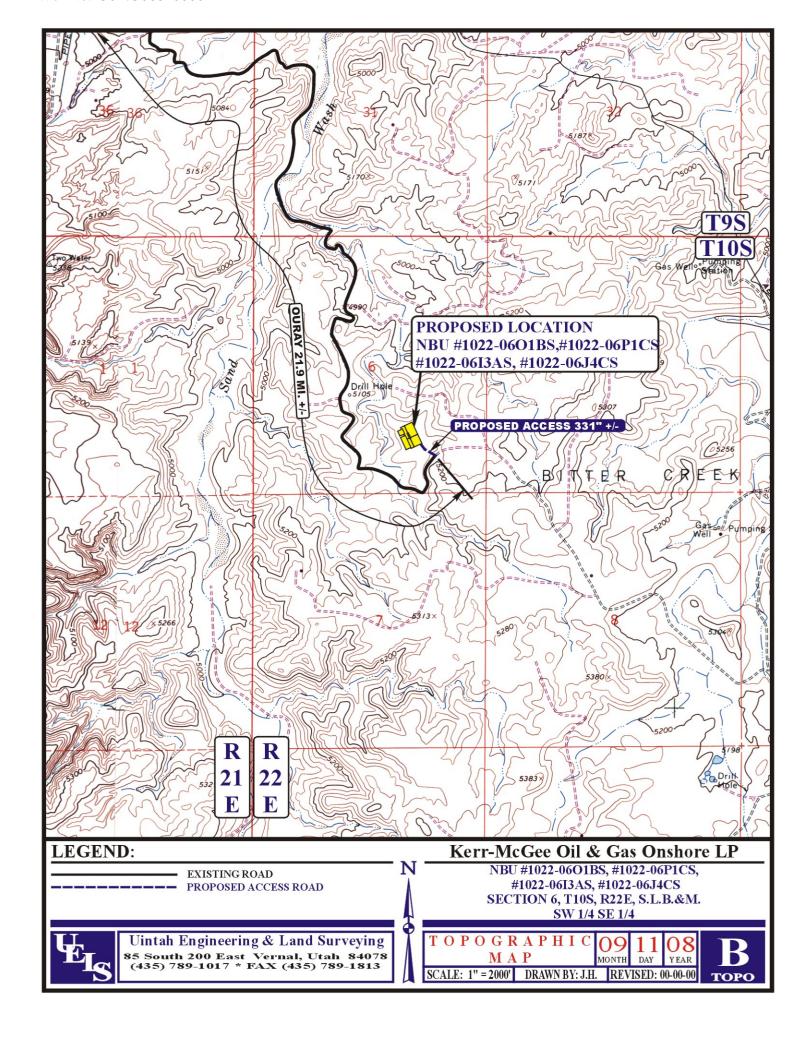


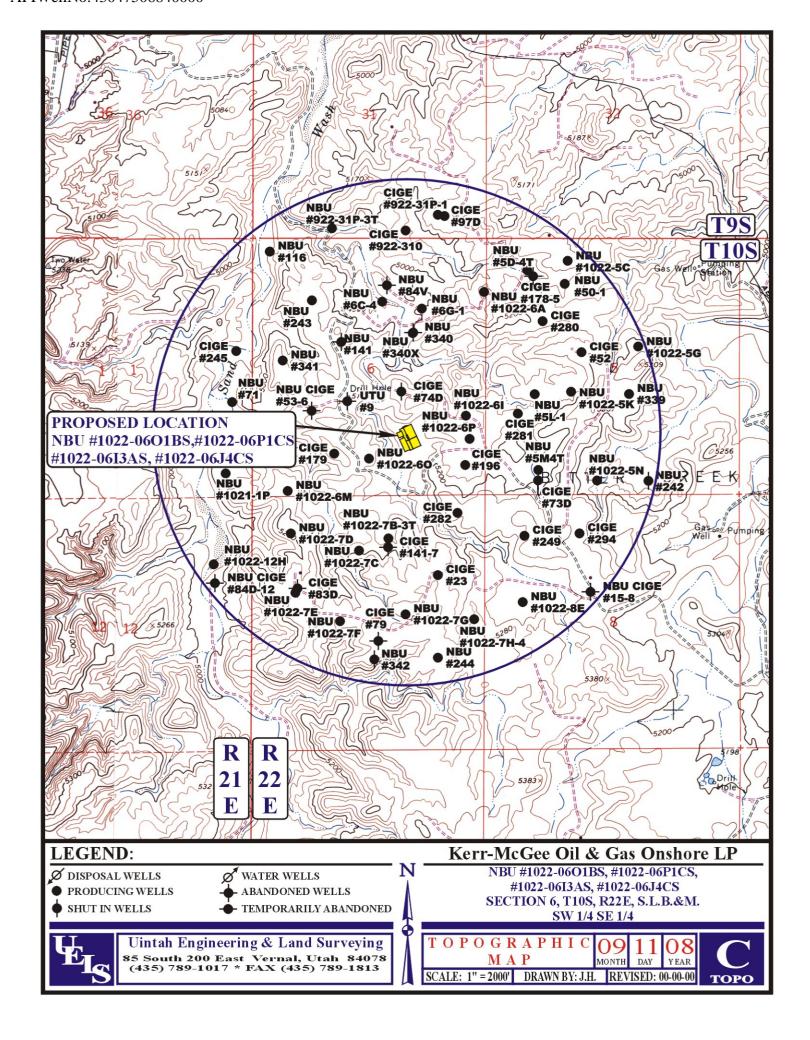
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

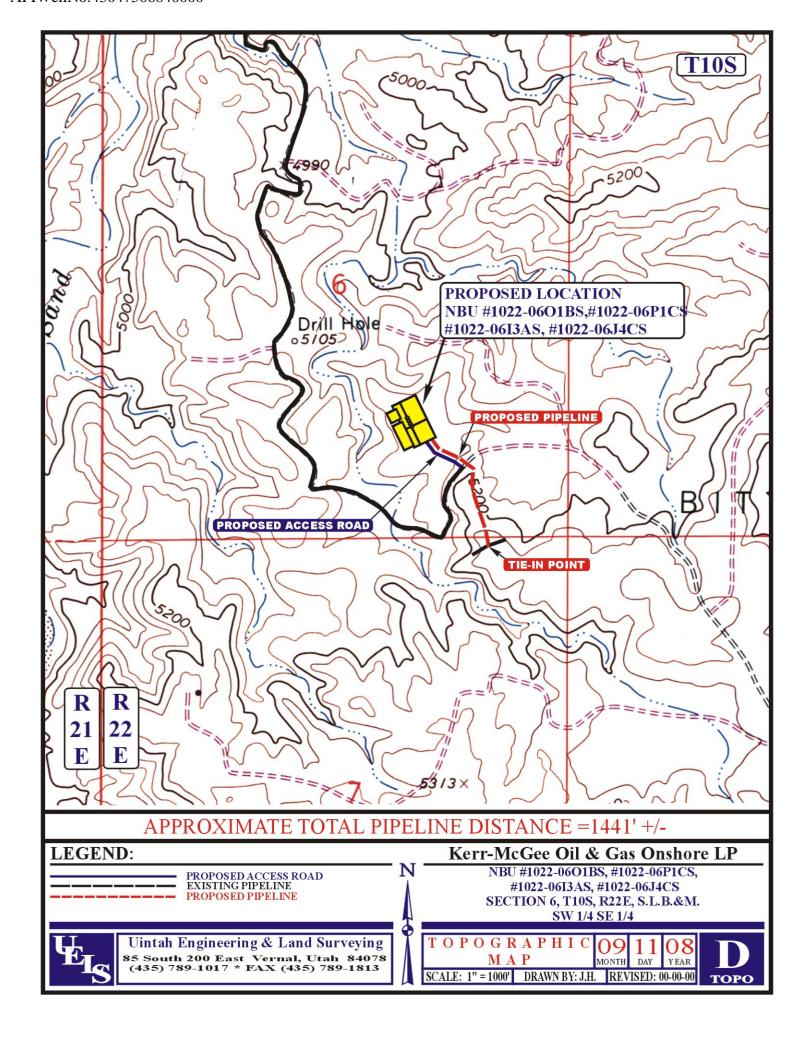












Kerr-McGee Oil & Gas Onshore LP

NBU #1022-06O1BS, #1022-06P1CS, #1022-06I3AS, #1022-06J4CS

LOCATED IN UINTAH COUNTY, UTAH SECTION 6, T10S, R22E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



LOCATION	09 MONTH	11 DAY	08 YEAR	РНОТО	
TAKEN BY: D.S.	DRAWN BY: J.H	. REV	ISED: 0	0-00-00	

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-06O1BS, #1022-06P1CS, #1022-06I3AS, #1022-06J4CS PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH SECTION 6, T10S, R22E, S.L.B.&M.



PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: NORTHWESTERLY



PIPELINE	09 MONTH	11 DAY	08 YEAR	РНОТО	
TAKEN BY: D.S.	DRAWN BY: J.H	. REV	ISED: (0-00-00	

Kerr-McGee Oil & Gas Onshore LP NBU #1022-06O1BS, #1022-06P1CS, #1022-06I3AS, #1022-06J4CS SECTION 6, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88: EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST: TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST: TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST: PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST: TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 4.9 MILES TO THE JUNCTION OF THIS ROAD AND THE PROPOSED ACCESS TO THE NORTHWEST: FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 331' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 52.9 MILES.

NBU 1022-6I3AS

Surface: 1,160' FSL 1,584' FEL (SW/4SE/4) BHL: 1,684' FSL 1,167' FEL (NE/4SE/4)

NBU 1022-6J4CS

Surface: 1,178' FSL 1,593' FEL (SW/4SE/4) BHL: 1,535' FSL 1,760' FEL (NW/4SE/4)

NBU 1022-601BS

Surface: 1,124' FSL 1,567' FEL (SW/4SE/4) BHL: 1,197' FSL 1,811' FEL (SW/4SE/4)

NBU 1022-6P1CS

Surface: 1,142' FSL 1,575' FEL (SW/4SE/4) BHL: 989' FSL 541' FEL (SE/4SE/4)

Mineral Lease: UTU 01195

Pad: NBU 1022-60 Sec. 6 T10S R22E

Uintah, Utah

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN SUBMITTED WITH SITE-SPECIFIC INFORMATION

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents. An NOS was submitted showing the surface locations in SW/4 SE/4 of Section 6 T10S R22E.

This Surface Use Plan of Operations (SUPO) or 13-point plan provides the site-specific information for the above-referenced wells. This information is to be incorporated by reference into the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee). The MDP is available upon request from the BLM-Vernal Field Office.

To schedule an onsite please contact Raleen White at 720-929-6666.

Directional Drilling:

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

1. Existing Roads:

- A) Refer to Topo Map A for directions to the location.
- B) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

NBU 1022-6I3AS / 6J4CS / 6O1BS / 6P1CS

2. Planned Access Roads:

See MDP for additional details on road construction.

Approximately ± 331 ' (± 0.06 miles) of new access road is proposed. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site and are typically shown on the attached Exhibits and Topo maps.

3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

4. Location of Existing and Proposed Facilities:

See MDP for additional details on Existing and Proposed Facilities.

The following guidelines will apply if the well is productive.

Approximately $\pm 1,441$ ' (± 0.27 miles) of pipeline is proposed. Refer to Topo D for the existing pipeline. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place.

Per request from the onsite meeting, corner 10 of the well pad will be rounded.

5. Location and Type of Water Supply:

See MDP for additional details on Location and Type of Water Supply.

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. Source of Construction Materials:

See MDP for additional details on Source of Construction Materials.

7. <u>Methods of Handling Waste Materials</u>:

See MDP for additional details on Methods of Handling Waste Materials.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

NBU 1022-6I3AS / 6J4CS / 6O1BS / 6P1CS

RNI in Sec. 5 T9S R22E

NBU #159 in Sec. 35 T9S R21E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

8. Ancillary Facilities:

See MDP for additional details on Ancillary Facilities.

None are anticipated.

9. Well Site Layout: (See Location Layout Diagram)

See MDP for additional details on Well Site Layout.

All pits will be fenced according to the following minimum standards:

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

10. Plans for Reclamation of the Surface:

See MDP for additional details on Plans for Reclamation of the Surface.

11. <u>Surface/Mineral Ownership</u>:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

12. Other Information:

See MDP for additional details on Other Information.

'APIWeIINo:43047506840000

M. Lessee's or Operators' Representative & Certification:

Kathy Schneebeck Dulnoan Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6007 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Karly Schill Duly	August 24, 2009
Kathy Schneebeck Dulnoan	Date



Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-37795

August 12, 2009

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11
NBU 1022-06I3AS
T10S R22E
Section 6: SWSE/NESE
SWSE 1160' FSL, 1584' FEL (surface)
NESE 1684' FSL, 1167' FEL (bottom hole)
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-06I3AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

JESSAY PINK

Jessy Pink Landman

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S 73 PROPOSED NBU WELL LOCATIONS IN TOWNSHIP 10S, RANGE 22E UINTAH COUNTY, UTAH

Ву:

Jacki A. Montgomery

Prepared For:

Bureau of Land Management
Vernal Field Office
and
School and Institutional
Trust Lands Administration

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP 1368 South 1200 East Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc. P.O. Box 219 Moab, Utah 84532

MOAC Report No. 08-268

October 16, 2008

United States Department of Interior (FLPMA)
Permit No. 08-UT-60122

Public Lands Policy Coordination Office Archaeological Survey Permit No. 117

Paleontological Reconnaissance Survey Report

Survey of Kerr McGee's Proposed Twin Wells and Pipelines for "NBU #1022-04M1S & K3S, #1022-05H2BS & H2LS, #1022-05L1S, 05E4S, 05F2S, & 05K1S, #1022-601BS, 06P1CS, 06I3AS, & 06J4CS" (Sec. 4-7, T 10 S, R 22 E)

Archy Bench Topographic Quadrangle Uintah County, Utah

October 8, 2008

Prepared by Stephen D. Sandau Paleontologist for Intermountain Paleo-Consulting P. O. Box 1125 Vernal, Utah 84078

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Operator: Anadarko Petroleum Company

Well(s): NBU 1022-06O1BS, -06P1CS, -06I3AS, -06J4CS

Location: Township 10 South, Range 22 East, Section 6

Survey

Date(s): October 15, 2008

Observer(s): SWCA Environmental Consultants, Inc. **Weather:** 55-60°F, clear skies, winds at 1 to 5 MPH

PROPOSED PROJECT:

Anadarko proposes to construct well NBU 1022-0601BS, -06P1CS, -06I3AS, -06J4CS in Township 10 South, Range 22 East, Section 6 in Uintah County, Utah. The proposed well is located west of Bonanza, Utah in the Book Cliffs Management Area of the Bureau of Land Management (BLM) Vernal Field Office. The project area has been historically impacted by mineral extraction activities, transportation corridors, agricultural and ranching activities, livestock grazing, and erosion. There is currently well construction activity occurring within the project area. A map of the proposed well can be found in Appendix D.

PROJECT AREA DESCRIPTION:

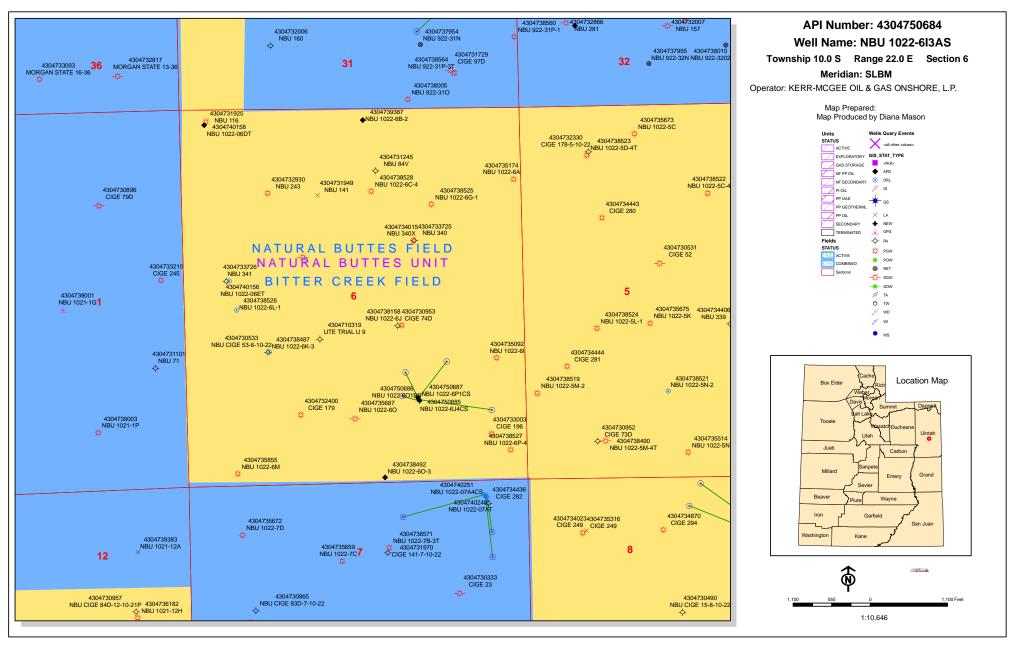
The proposed project area is underlain by sedimentary deposits of the Uinta Formation of Late Middle Eocene age at an elevation of approximately 5,160 feet. Soils in the project area are predominantly sandy clay. Topography within the project area consists of moderately steep rolling hills cut by washes with some rocky outcrops. Slopes within the project area boundary range from 0 to 20 percent.

The vegetation in the project area is a desert shrub community. For a complete list of common plants associated with the desert shrub community in the project area see Appendix A.

SURVEY METHODOLOGY:

In October 2008, the Utah Department of Wildlife Resources website (http://dwrcdc.nr.utah.gov/ucdc/) was reviewed for Uintah County. This site contains the U.S. Fish and Wildlife Service list of threatened, endangered, and candidate species as well as the BLM/Utah state sensitive species list. In addition, past survey reports and environmental documents were reviewed to determine which federally listed threatened, endangered, and candidate species, and which Utah/BLM sensitive species (collectively referred to as special status species) have the potential to occur in the project area. For a complete list of special status plant species within Uintah County see Appendix B. For a complete list of special status wildlife species within Uintah County see Appendix C.

From this pre-project assessment, it was determined that *Sclerocactus sp.* (*brevispinus* and/or *wetlandicus*) has potential to occur within the proposed project area. Both *S. brevispinus* and *S. wetlandicus* are protected under the Endangered Species Act as *Sclerocactus glaucus*.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

August 28, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2009 Plan of Development Natural Buttes Unit Uintah

County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME LOCATION									
(Proposed PZ	posed PZ WASATCH-MESA VERDE)									
43-047-50640	NBU	1022-8B1DS BHL				R22E R22E				
43-047-50641	NBU	1022-8B4AS BHL				R22E R22E				
43-047-50642	NBU	1022-8C1AS BHL				R22E R22E			_	
43-047-50643	NBU	1022-8C1CS BHL				R22E R22E				
43-047-50644	NBU	922-30C3S BHL				R22E R22E				
43-047-50645	NBU	922-30D3AS BHL				R22E R22E				
43-047-50646	NBU	921-30C3CS BHL				R21E R21E				
43-047-50647	NBU	921-30D2DS BHL				R21E R21E				

Page 2

API # WELL NAME

LOCATION

(Proposed PZ WASATCH-MESA VERDE)

- 43-047-50648 NBU 921-30D3DS Sec 30 T09S R21E 0759 FNL 0887 FWL BHL Sec 30 T09S R21E 1152 FNL 0665 FWL
- 43-047-50649 NBU 921-30E2AS Sec 30 T09S R21E 0771 FNL 0903 FWL BHL Sec 30 T09S R21E 1522 FNL 0665 FWL
- 43-047-50650 NBU 1022-7N1S Sec 07 T10S R22E 0089 FSL 1920 FEL BHL Sec 07 T10S R22E 0895 FSL 1870 FWL
- 43-047-50651 NBU 1022-7N4S Sec 07 T10S R22E 0097 FSL 1938 FEL BHL Sec 07 T10S R22E 0595 FSL 1740 FWL
- 43-047-50652 NBU 1022-704AS Sec 07 T10S R22E 0081 FSL 1902 FEL BHL Sec 07 T10S R22E 0550 FSL 1560 FEL
- 43-047-50653 NBU 1022-7O4DS Sec 07 T10S R22E 0074 FSL 1883 FEL BHL Sec 07 T10S R22E 0230 FSL 1650 FEL
- 43-047-50655 NBU 922-30D3DS Sec 30 T09S R22E 1226 FNL 0588 FWL BHL Sec 30 T09S R22E 1314 FNL 0352 FWL
- 43-047-50656 NBU 922-30E2AS Sec 30 T09S R22E 1246 FNL 0645 FWL BHL Sec 30 T09S R22E 1636 FNL 0352 FWL
- 43-047-50678 NBU 922-31G4BS Sec 31 T09S R22E 2317 FSL 0188 FEL BHL Sec 31 T09S R22E 1994 FNL 1808 FEL
- 43-047-50679 NBU 922-31G4CS Sec 31 T09S R22E 2316 FSL 0198 FEL BHL Sec 31 T09S R22E 2353 FNL 1796 FEL
- 43-047-50680 NBU 922-31I1AS Sec 31 T09S R22E 2317 FSL 0178 FEL BHL Sec 31 T09S R22E 2483 FSL 0243 FEL
- 43-047-50681 NBU 922-3111DS Sec 31 T09S R22E 2317 FSL 0168 FEL BHL Sec 31 T09S R22E 2137 FSL 0264 FEL
- 43-047-50682 NBU 921-12J Sec 12 T09S R21E 1959 FSL 2051 FEL
- 43-047-50684 NBU 1022-6I3AS Sec 06 T10S R22E 1160 FSL 1584 FEL BHL Sec 06 T10S R22E 1684 FSL 1167 FEL
- 43-047-50685 NBU 1022-6J4CS Sec 06 T10S R22E 1178 FSL 1593 FEL BHL Sec 06 T10S R22E 1535 FSL 1760 FEL
- 43-047-50686 NBU 1022-6O1BS Sec 06 T10S R22E 1124 FSL 1567 FEL BHL Sec 06 T10S R22E 1197 FSL 1811 FEL

Page 3

API # WELL NAME

LOCATION

(Proposed PZ WASATCH-MESA VERDE)

43-047-50687 NBU 1022-6P1CS Sec 06 T10S R22E 1142 FSL 1575 FEL BHL Sec 06 T10S R22E 0989 FSL 0541 FEL

43-047-50691 NBU 921-29A3AS Sec 29 T09S R21E 0299 FNL 2630 FEL BHL Sec 29 T09S R21E 0700 FNL 0885 FEL

43-047-50692 NBU 921-29A3DS Sec 29 T09S R21E 0303 FNL 2628 FWL BHL Sec 29 T09S R21E 1193 FNL 0885 FEL

43-047-50694 NBU 921-29A2AS Sec 29 T09S R21E 0296 FNL 2611 FEL BHL Sec 29 T09S R21E 0209 FNL 0885 FEL

43-047-50693 NBU 921-29B2CS Sec 29 T09S R21E 0307 FNL 2608 FWL BHL Sec 29 T09S R21E 0443 FNL 2635 FEL

43-047-50695 NBU 921-12N Sec 12 T09S R21E 0441 FSL 2236 FWL

43-047-50698 NBU 921-19F Sec 19 T09S R21E 2236 FNL 2285 FWL

43-047-50699 NBU 921-17C Sec 17 T09S R21E 0656 FNL 2004 FWL

43-047-50700 NBU 921-17D Sec 17 T09S R21E 0985 FNL 0418 FWL

43-047-50701 NBU 921-17G Sec 17 T09S R21E 1500 FNL 2262 FEL

43-047-50702 NBU 921-17H Sec 17 T09S R21E 2100 FNL 0553 FEL

43-047-50703 NBU 921-18P Sec 18 T09S R21E 1080 FSL 0197 FEL

43-047-50704 NBU 921-19E Sec 19 T09S R21E 2061 FNL 0842 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	8/24/2009	API NO. ASSIGNED:	43047506840000
WELL NAME:	NBU 1022-6I3AS		
OPERATOR:	KERR-MCGEE OIL &	k GAS ONSHORE, L.P. (N2995) PHONE NUMBER:	720 929-6156
CONTACT:	Danielle Piernot		
PROPOSED LOCATION:	SWSE 6 100S 220E	Permit Tech Review:	
SURFACE:	1160 FSL 1584 FEL	Engineering Review:	
воттом:	1684 FSL 1167 FEL	Geology Review:	
COUNTY:	UINTAH		
LATITUDE:	39.97393	LONGITUDE:	-109.47805
UTM SURF EASTINGS:	629968.00	NORTHINGS:	4425763.00
FIELD NAME:	NATURAL BUTTES		
LEASE TYPE:	1 - Federal		
LEASE NUMBER:	UTU 01195	PROPOSED PRODUCING FORMATION(S): WASATCH-MES	SA VERDE
SURFACE OWNER:	1 - Federal	COALBED METHANE:	NO
RECEIVED AND/OR REVIE	·WED:	LOCATION AND SITING:	
PLAT		R649-2-3.	
, <u> </u>		, <u>—</u>	
Bond: FEDERAL - WYB	300291	Unit: NATURAL BUTTES	
Potash		R649-3-2. General	
☑️ Oil Shale 190-5			
Oil Shale 190-3		№ R649-3-3. Exception	
Oil Shale 190-13		✓ Drilling Unit	
✓ Water Permit: Permit	#43-8496	Board Cause No: Cause 173-14	
RDCC Review:		Effective Date: 12/2/1999	
Fee Surface Agreeme	ent	Siting: 460' fr u bdry & uncomm. tract	
✓ Intent to Commingle		✓ R649-3-11. Directional Drill	
Commingling Approved	d		
Comments: Presite C	ompleted		
Stinulations: 1 - Evce	intion Location - dma	eson	

1 - Exception Location - dmason
3 - Commingling - ddoucet
4 - Federal Approval - dmason
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 1022-6I3AS API Well Number: 43047506840000 Lease Number: UTU 01195

Surface Owner: FEDERAL Approval Date: 9/2/2009

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil

shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

 Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
 OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

Gil Hunt

Associate Director, Oil & Gas

Die Hunt

	STATE OF UTAH		FORM 9
	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195	
SUND	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-6I3AS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047506840000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE NU treet, Suite 600, Denver, CO, 80217 3779	JMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1160 FSL 1584 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWSE Section: 06		STATE: UTAH	
11. CHE	CK APPROPRIATE BOXES TO INDICATE NA	ATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & G extension to this A	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF	spectfully requests an d. Please contact the ents. Thank you.	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL ✓ APD EXTENSION OTHER: Olumes, etc. Approved by the Utah Division of Oil, Gas and Mining ate: August 31, 2010 y:
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Danielle Piernot SIGNATURE	720 929-6156	Regulatory Analyst DATE (21/2010)	
N/A		8/31/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506840000

API: 43047506840000 Well Name: NBU 1022-6I3AS

Location: 1160 FSL 1584 FEL QTR SWSE SEC 06 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 9/1/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that requ

	tion as submitted in sion. Following is a c						
	ated on private land, ed? 🔵 Yes 📵 No		ership changed, if	so, has the s	urface a <u>c</u>	reement been	
	any wells been drille requirements for thi			d well which	would af	fect the spacing or	
	here been any unit or s proposed well?			that could a	ffect the	permitting or oper	ation
	there been any chang the proposed location			g ownership	, or right	of- way, which cou	ld
• Has ti	ne approved source o	of water for d	rilling changed? (Yes 📵	No		
	there been any phys je in plans from what						
• Is bor	nding still in place, w	hich covers t	his proposed well?	' 🗓 Yes 🦲	No U	oproved by the tah Division of Gas and Mining	
nature:	Danielle Piernot		8/31/2010				
Title:	Regulatory Analyst Re	epresenting:	KERR-MCGEE OIL &	GAS ONSHOR	<u> </u>	August 31, 2010	
	. ,	_			P	$O(M_{Do})$	

Sig

By: Doll

Sundry Number: 17676 API Well Number: 43047506840000

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195
SUND	RY NOTICES AND REPORTS ON	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	sals to drill new wells, significantly deepen exis igged wells, or to drill horizontal laterals. Use A		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-6I3AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047506840000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE N treet, Suite 600, Denver, CO, 80217 3779	UMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1160 FSL 1584 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWSE Section: 06	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT	, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & G extension to this A	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF	espectfully requests and ed. Please contact the ents. Thank you.	
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Gina Becker SIGNATURE	720 929-6086	Regulatory Analyst II DATE	
N/A		8/19/2011	

Sundry Number: 17676 API Well Number: 43047506840000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506840000

API: 43047506840000 **Well Name:** NBU 1022-6I3AS

Location: 1160 FSL 1584 FEL QTR SWSE SEC 06 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 9/1/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

 If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? Yes No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
D-1 0/40/2011

Signature: Gina Becker **Date:** 8/19/2011

Title: Regulatory Analyst II Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195
SUNDF	RY NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-613AS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047506840000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	PHO h Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1160 FSL 1584 FEL	COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSI Qtr/Qtr: SWSE Section: (S	STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
/	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start: 8/30/2012	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
0/30/2012	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION
·	WILDCAT WELL DETERMINATION	OTHER	OTHER:
Kerr-McGee Oil & G an extension to this	completed operations. Clearly show all persons on shore, L.P. (Kerr-McGee) APD for the maximum time allowith any questions and/or complete.	respectfully requests owed. Please contact	Approved by the Utah Division of Oil, Gas and Mining Date: September 13, 2012 By:
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE Regulatory Applyet	
Danielle Piernot SIGNATURE	720 929-6156	Regulatory Analyst DATE	
N/A		8/30/2012	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506840000

API: 43047506840000 **Well Name:** NBU 1022-613AS

Location: 1160 FSL 1584 FEL QTR SWSE SEC 06 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

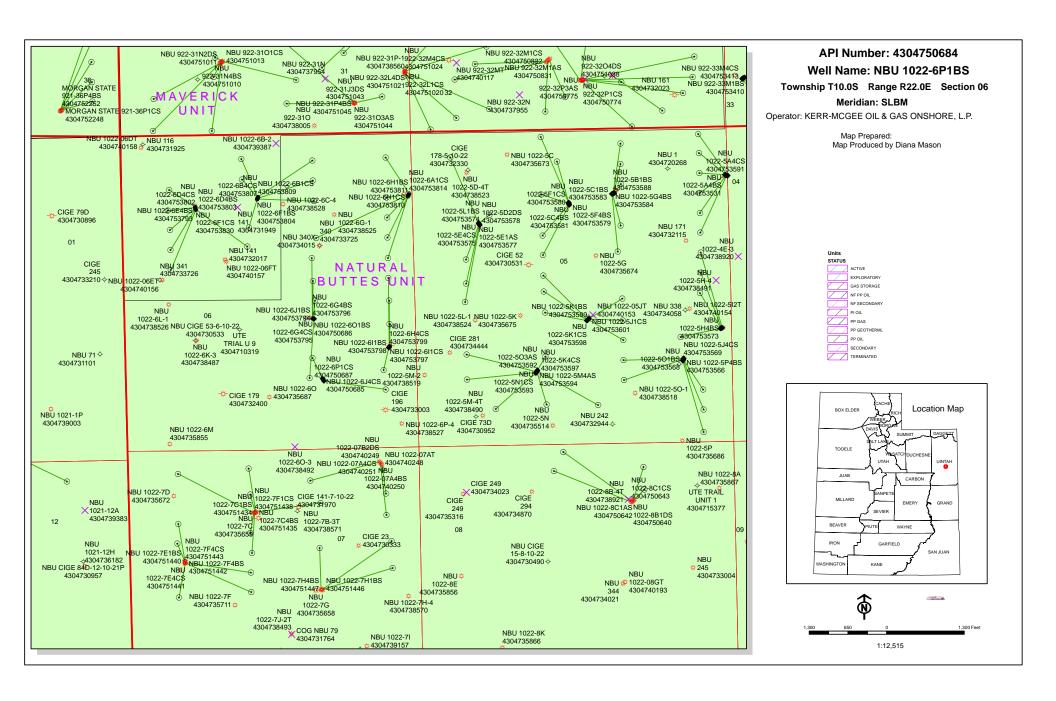
Date Original Permit Issued: 9/1/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

Tollowing is a checklist of some items related to the application, which should be verified.
 If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of thi proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? 🔘 Yes 📵 No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? 📵 Yes 🔘 No
Signature: Danielle Piernot Date: 8/30/2012

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

	STATE OF UTAH		FORM 9
1	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-6P1BS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047506840000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 8021	PHONE NUMBER: 17 3779 720 929-0	9. FIELD and POOL or WILDCAT: 5NI&TUERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1693 FSL 0476 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SWSE Section: 0	STATE: UTAH		
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
6/15/2013	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	☐ VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all pertinent details including dates.	depths. volumes. etc.
The operator is re the originally appre	equesting the approval of the oved APD 1. Change the \J 1022-6P1BS \ 2. Surface (he following changes to Well Name = from NBU	Approved by the Utah Division of Oil, Gas and Mining
	Plat Package is Attached) \ a		Date: June 05, 2013
	To = 1693 FSL/476 FEL \ b		Date: I con cut ill
	= 1313 FSL/569 FEL \ 3. Pro		By:
	ached) \ 4. Surface Hole Siz Attached) \ 5. Change to Di		
•	Survey Attached) \ 6. Surfac	•	
	ached) \ 7. Updated Topos		
NAME (PLEASE PRINT) Gina Becker	PHONE NUMB 720 929-6086	BER TITLE Regulatory Analyst II	
SIGNATURE		DATE	
N/A		5/29/2013	



NBU 1022-6I Pad Drilling Program

1 of 6

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-6P1BS

Surface: 1693 FSL / 476 FEL NESE BHL: 1313 FSL / 569 FEL SESE

Section 6 T10S R22E

Unitah County, Utah Mineral Lease: UTU-01195

ONSHORE ORDER NO. 1

DRILLING PROGRAM

Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,228'	
Birds Nest	1,548'	Water
Mahogany	2,023'	Water
Wasatch	4,453'	Gas
Mesaverde	7,021'	Gas
Sego	9,207'	Gas
Castlegate	9,258'	Gas
Blackhawk	9,696'	Gas
TVD =	10,296'	
TD =	10,325'	

2.b Kerr McGee Oil & Gas Onshore LP (Kerr McGee) may elect to drill to (i) the Blackhawk formation (part of the Mesaverde Group), (ii) to a shallower depth within the Mesaverde Group, or (iii) to the Wasatch Formation. If Kerr McGee drills to the Blackhawk formation, please refer to Blackhawk as the bottom formation. The attached Blackhawk Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the deeper formation.

If Kerr-McGee drills to a shallower depth in the Mesaverde Group or to the Wasatch Formation, please refer to the attached Wasatch/Mesaverde Drilling Program which includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the shallower formations.

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the Standard Operating Practices on file with the BLM Vernal Field Office.

NBU 1022-6I Pad Drilling Program
2 of 6

4. <u>Proposed Casing & Cementing Program:</u>

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

5. Drilling Fluids Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

6. Evaluation Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

7. **Abnormal Conditions:**

7.a Blackhawk (Part of Mesaverde Group)

Maximum anticipated bottom hole pressure calculated at 6,589 psi (0.64 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,310 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

7.b Wasach Formation/Mesaverde Group

Maximum anticipated bottom hole pressure calculated at 9207' TVD, approximately equals 5.616 psi (0.61 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,615 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the Standard Operating Practices on file with the BLM Vernal Field Office.

10. Other Information:

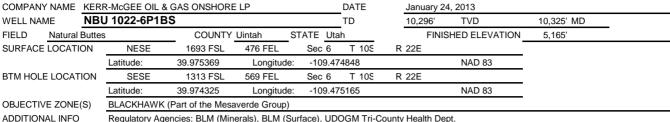
Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

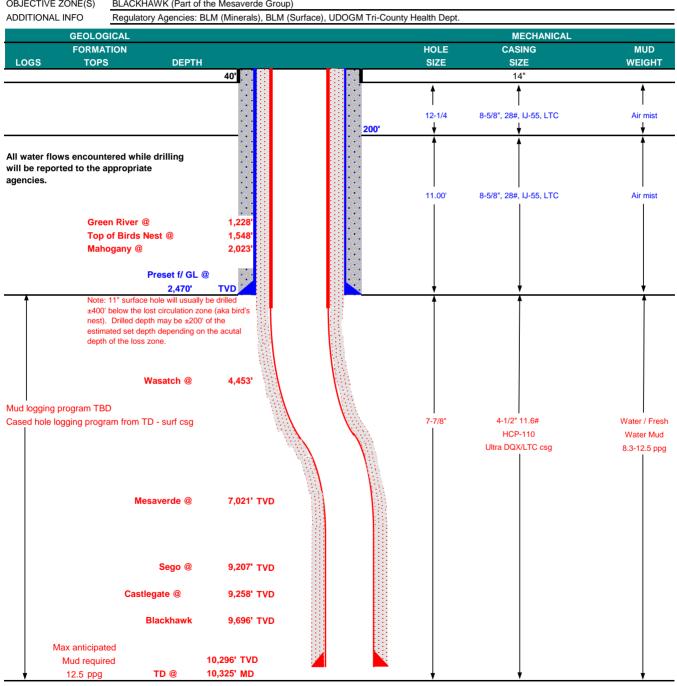
1/24/2013

RECEIVED: May. 29, 2013



KERR-McGEE OIL & GAS ONSHORE LP Blackhawk Drilling Program





Drilling Program 4 of 6

DESIGN FACTORS



KERR-McGEE OIL & GAS ONSHORE LP Blackhawk Drilling Program

CASING PROGRAM

CONDUCTOR

PRODUCTION

SURFACE

									LTC	DQX
SIZE	INT	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TE	NSION
14"	0-40'									
							3,390	1,880	348,000	N/A
8-5/8"	0	to	2,470	28.00	IJ-55	LTC	2.18	1.63	5.75	N/A
							10,690	8,650	279,000	367,174
4-1/2"	0	to	5,000	11.60	HCP-110	DQX	1.19	1.29		3.79
4-1/2"	5,000	to	10,325'	11.60	HCP-110	LTC	1.19	1.29	5.58	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

ĺ	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1		+ 0.25 pps flocele				
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
		+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water to s	surface, option	on 2 will be	utilized	
Option 2 LEAD	1,970'	Premium cmt + 16% Gel + 10 pps gilsonite	240	35%	12.00	2.86
		+ 0.25 pps Flocele + 3% salt BWOC + GR 3 pps				
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
		+ 0.25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION LEAD	3,945'	Premium Lite II +0.25 pps celloflake + .4% FL-52	310	35%	12.00	3.38
		+ .3% R-3 + .5 lbs/sk Kol-Seal + 6%Bentonite II +				
		1.2% Sodium Metasilicate + .05 lbs/sk Static Free				
TAIL	6,380'	50/50 Poz/G + 10% salt + .05 lbs/sk Static Free	1,510	35%	14.30	1.31
		+ 1.2% Sodium Metasilicate + .5 % EC-1				
		+.002 gps FP-6L + 2% Bentonite II				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11* 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be	taken at	1,000'	minimum	intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

IF extreme mud losses are observed OR cement doesn't reach surface on a well on the pad, a DV Tool may be used. With Cement Baskets above and Below it.

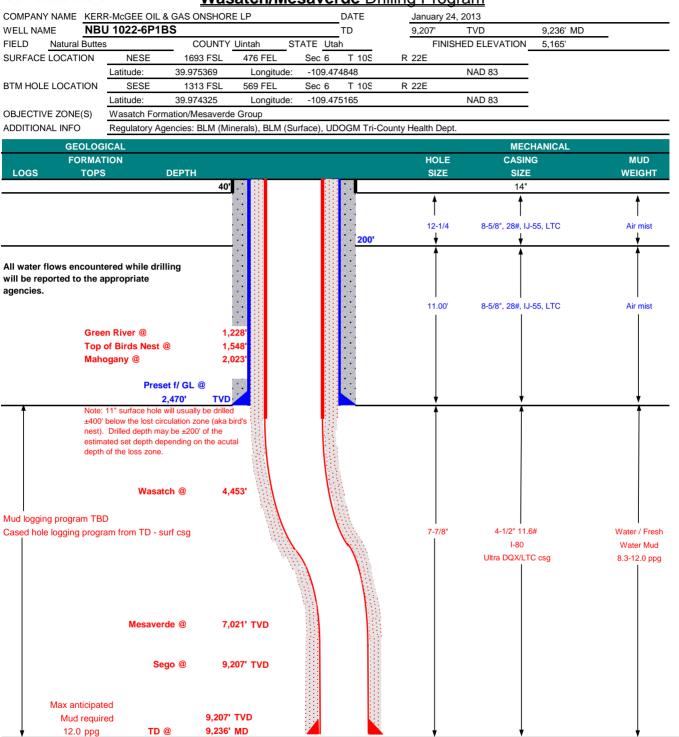
DRILLING ENGINEER:		DATE:				
	Nick Spence / John Tuckwiller / Brian Cocchiere / Tyler Elliott					
DOLLING SUDEDINTENDENT:		DATE:				

Kenny Gathings / Lovel Young

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained



KERR-McGEE OIL & GAS ONSHORE LP Wasatch/Mesaverde Drilling Program





KERR-McGEE OIL & GAS ONSHORE LP
Wasatch/Mesaverde Drilling Program

CASING PROGRAM							DESIGN FACTORS				
									LTC	DQX	
	SIZE	INT	ERVA	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TE	NSION
CONDUCTOR	14"	()-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,470	28.00	IJ-55	LTC	2.18	1.63	5.75	N/A
								7,780	6,350		267,035
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	1.11		3.05
								7,780	6,350	223,000	
	4-1/2"	5,000	to	9,236'	11.60	I-80	LTC	1.11	1.11	5.56	

Surface Casing:

(Burst Assumptions: TD = 12.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.61 psi/ft = bottomhole gradient (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGH1	YIELD	
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15	
Option 1		+ 0.25 pps flocele					
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15	
		+ 2% CaCl + 0.25 pps flocele					
SURFACE		NOTE: If well will circulate water to so	urface, option	n 2 will be u	tilized		
Option 2 LEAD	1,970'	Premium cmt + 16% Gel + 10 pps gilsonite	240	35%	12.00	2.86	
		+ 0.25 pps Flocele + 3% salt BWOC + GR 3 pps					
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15	
		+ 0.25 pps Flocele + 3% salt BWOC + GR 3 pps					
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15	
PRODUCTION LEAD	3,946'	Premium Lite II +0.25 pps celloflake + .4% FL-52	310	35%	12.00	3.38	
		+ .3% R-3 + .5 lbs/sk Kol-Seal + 6%Bentonite II +					
		1.2% Sodium Metasilicate + .05 lbs/sk Static Free					
TAIL	5,290'	50/50 Poz/G + 10% salt + .05 lbs/sk Static Free	1,250	35%	14.30	1.31	
		+ 1.2% Sodium Metasilicate + .5 % EC-1					
		+.002 gps FP-6L + 2% Bentonite II					

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

PRODUCTION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11* 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

IF extreme mud losses are observed OR cement doesn't reach surface on a well on the pad, a DV Tool may be used. With Cement Baskets above and Below it.

DRILLING ENGINEER:		DATE:
DRILLING SUPERINTENDENT:	Nick Spence / John Tuckwiller / Brian Cocchiere / Tyler Elliott	DATE:
	Kenny Gathings / Lovel Young	

NBU 1022-6l Pad- Drilling Program Approved by Drilling- 012413.xlsx

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

Sundry Number: 38273 API Well Number: 43047506840000 T10S, R22E, S.L.B.&M. S89°55'E - 73.83 (G.L.O.) S89°53'00"E S89°51'29"E W.C. S89°55'E Found 1977 924.81' (Meas.) 0.80 (G.L.O.) S89°51'51"E - 2579.53' (Meas.) 1368.62' (Meas.) Found 1977 Brass Cap, Set Stone, Steel Post 19.93 (G.L.O.) Brass Cap. 14.02 (G.L.O.) 39.88 (G.L.O.) W.C Found 1977 Pile of Stones. & Pile of Stones. Brass Cap, Pile Found 1977 of Stones. Brass Cap. Pile of Stones. Ġ N0°29'W - 40.56 (G.L.O.) N00°26'48"W - 2677.38' (Meas N00°35'26"W - 2661.54' (Meas. LOT 2 LOT 3 <u>(a)</u> LOT 1 LOT 4 21.47 NBU 1022-6P1BS (Surface Position) 20. NAD 83 LATITUDE = 39.975369° (39° 58' 31.328") LONGITUDE = 109.474848° (109° 28' 29.453") NAD 27 LATITUDE = 39.975404° (39° 58' 31.453") LONGITUDE = 109.474163° (109° 28' 26.988") 0 <u>ල</u> NBU 1022-6P1BS (Bottom Hole) 19.925 (LOT 5 NAD 83 LATITUDE = 39.974325° (39° 58' 27.570") 60 N0°36'W - 80.18 (G.L.O. LONGITUDE = 109.475165° (109° 28' 30.593") NAD 27 LATITUDE = 39.974360° (39° 58' 27.695") Found 1977 LONGITUDE = 109.474480° (109° 28' 28.128") Brass Cap, Pile of Stones. Found 1991 Aluminum Cap Pile of Stones. S00°25'59"E - 2614.79' (Meas. Well Surface Position N0°28'W - 39.64 (G.L.O.) **WELL LOCATION:** LOT 6 2629.48' (Measured) 476' NBU 1022-6P1BS Bottom of Hole ELEV. UNGRADED GROUND = 5167.31 569 Ó V00°34'50"W 85 (G.L. 1693 LOT 7 39 Found 1991 Found 1977 Brass Aluminum Cap, Cap in Pile of Found 1991 13.79 (G.L.O.) 20.23 (G.L.O.) Pile of Stones Stones, Fence Aluminum Cap, N89°22'54"W - 2245.54' (Meas.) Post South of Cap. S89°41'37"W - 2641.02' (Meas.) Pile of Stones. N89°24'W - 34.02 (G.L.O.) S89°40'W - 40.02 (G.L.O.) NOTES: = Section Corners Located 1. Well footages are measured at right angles to the Section Lines. G.L.O. distances are shown in feet or chains. SCALE 2. 1 chain = 66 feet. SURVEYOR'S CERTIFICATE 3. The Bottom of hole bears \$13°08'25"W 390.58' from the Surface Position. THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED 4. NAD 83 Latitude & Longitude are (CORS 96)(EPOCH:2002). FROM FIELD NOTES OF ACTUAL SURVEYS MARGE BY ME OR 5. Bearings and Distances are based upon a Local Cartesian Grid, UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE oriented to Geodetic North at the North 1/4 Corner of Section 8, AND CORRECT TO THE BEST OF AN KNOWLEDGE AND BELIEF. T10S, R22E, S.L.B.&M. The Grid having a mean project height of 5300'. Lineal units used are U.S. Survey Foot. 6. Basis of elevation is Tri-Sta "Two Water" located in Lot 4 of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'. GISTRATION KO28691 Kerr-McGee Oil & Gas Onshore, LP STATE OF UTAPPORT 1099 18th Street - Denver, Colorado 80202 (435) 789-1365 **WELL PAD: NBU 1022-61** TIMBERLINE ENGINEERING & LAND SURVEYING, INC. NBU 1022-6P1BS 209 NORTH 300 WEST - VERNAL, UTAH 84078 **WELL PLAT** DATE SURVEYED: CONSULTING, LLC SHEET NO: SURVEYED BY: W.W. 8-9-12 1313' FSL, 569' FEL (Bottom Hole) 2155 North Main Street DATE DRAWN:

Sheridan WY 82801

Phone 307-674-0609

Fax 307-674-0182

8-22-12

SCALE: 1" = 1000'

SE $\frac{1}{4}$ SE $\frac{1}{4}$ OF SECTION 6, T10S, R22E,

S.L.B.&M., UINTAH COUNTY, UTAH.

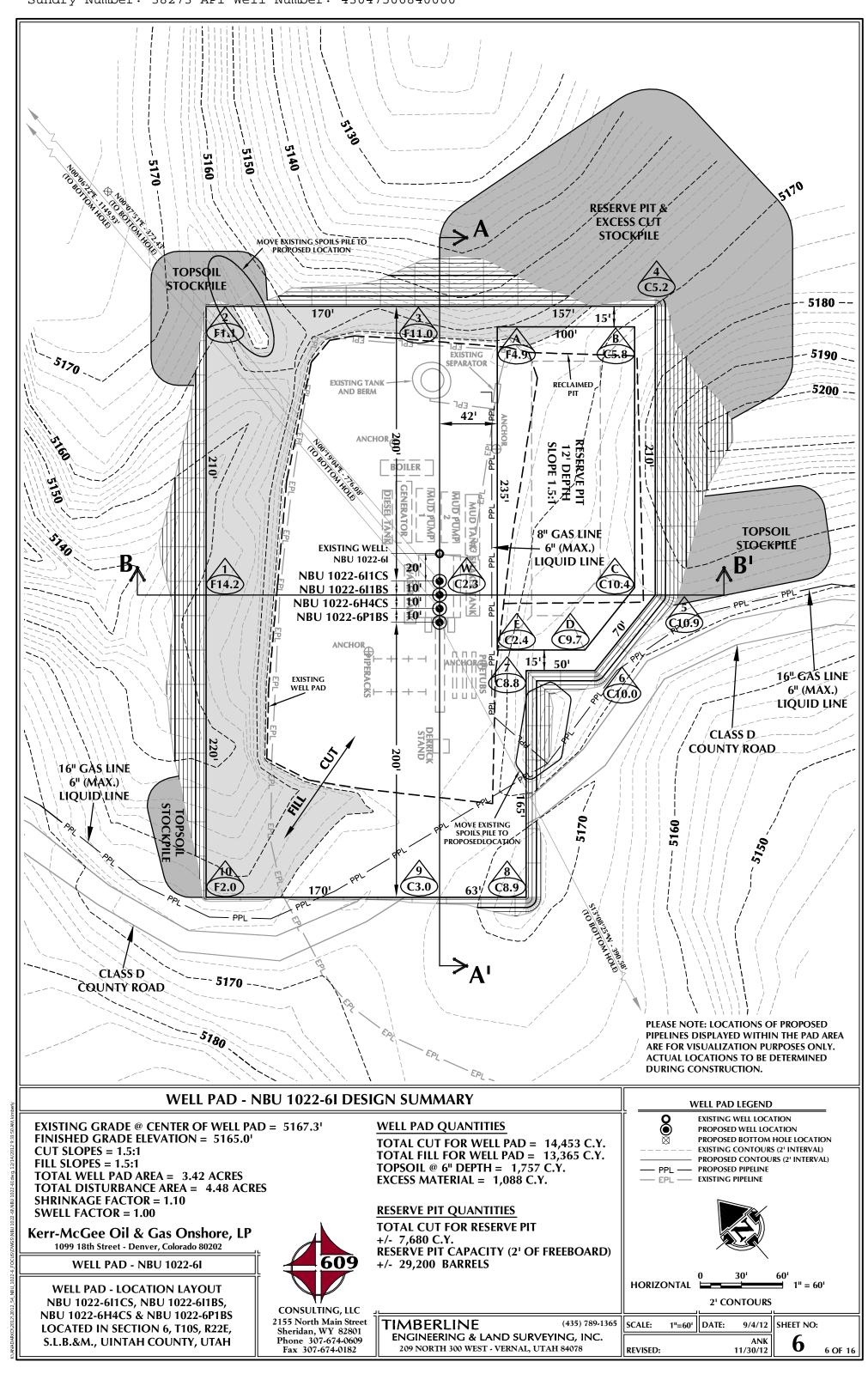
RECEIVED: May. 29, 2013

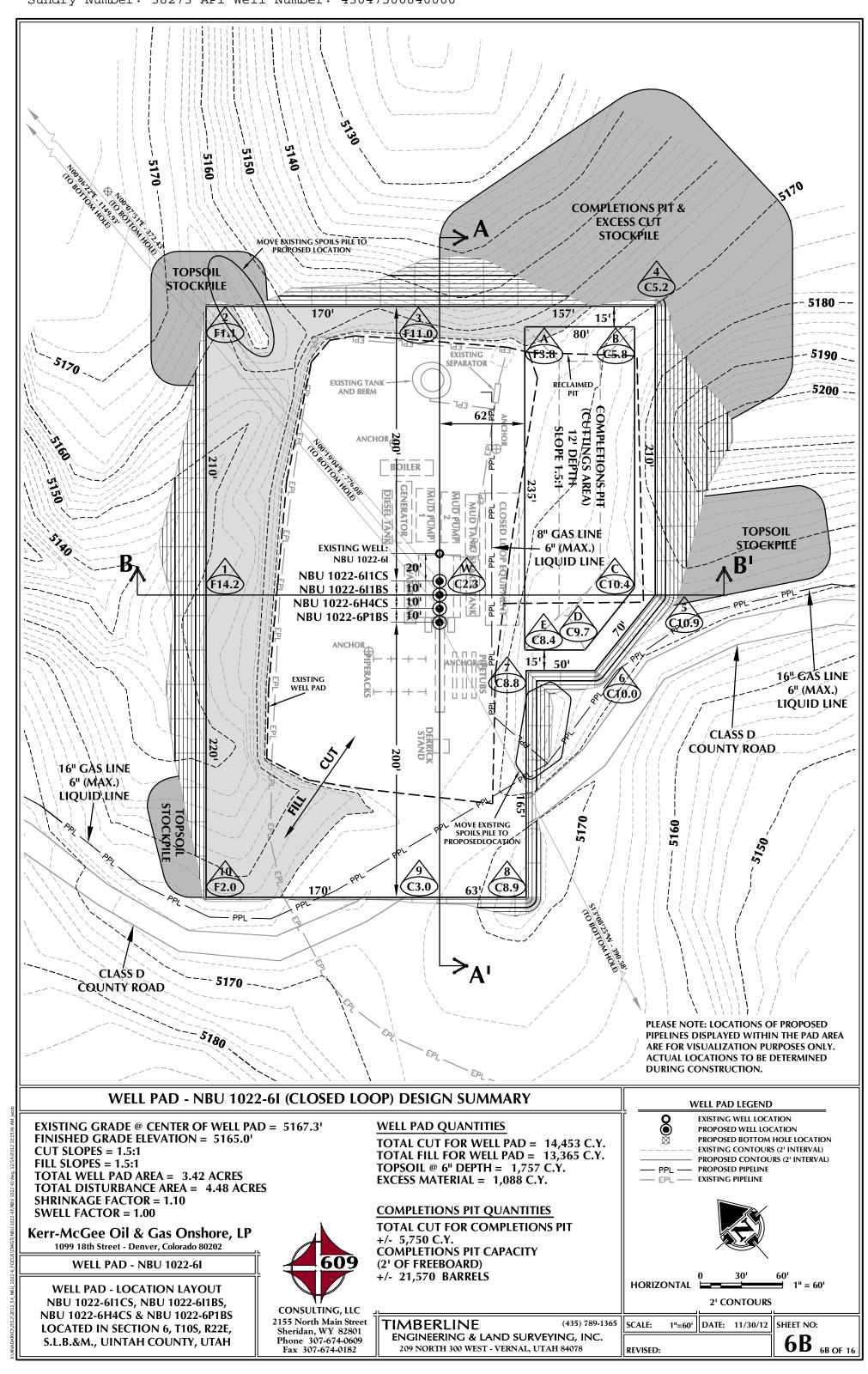
4 OF 16

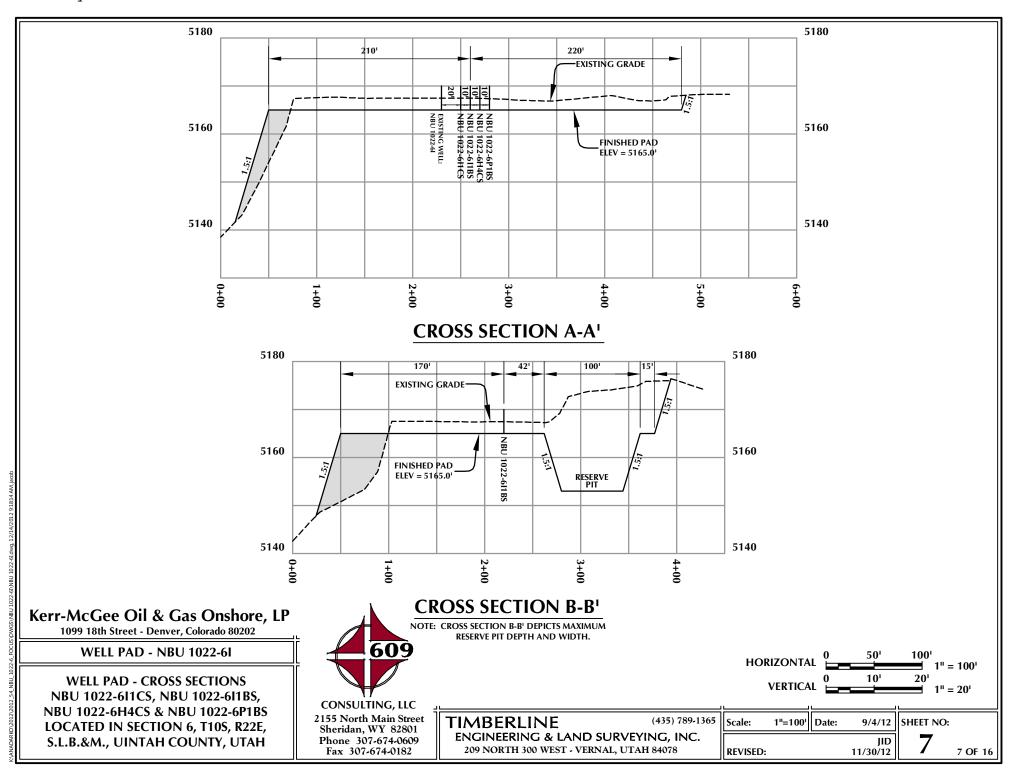
DRAWN BY: T.J.R.

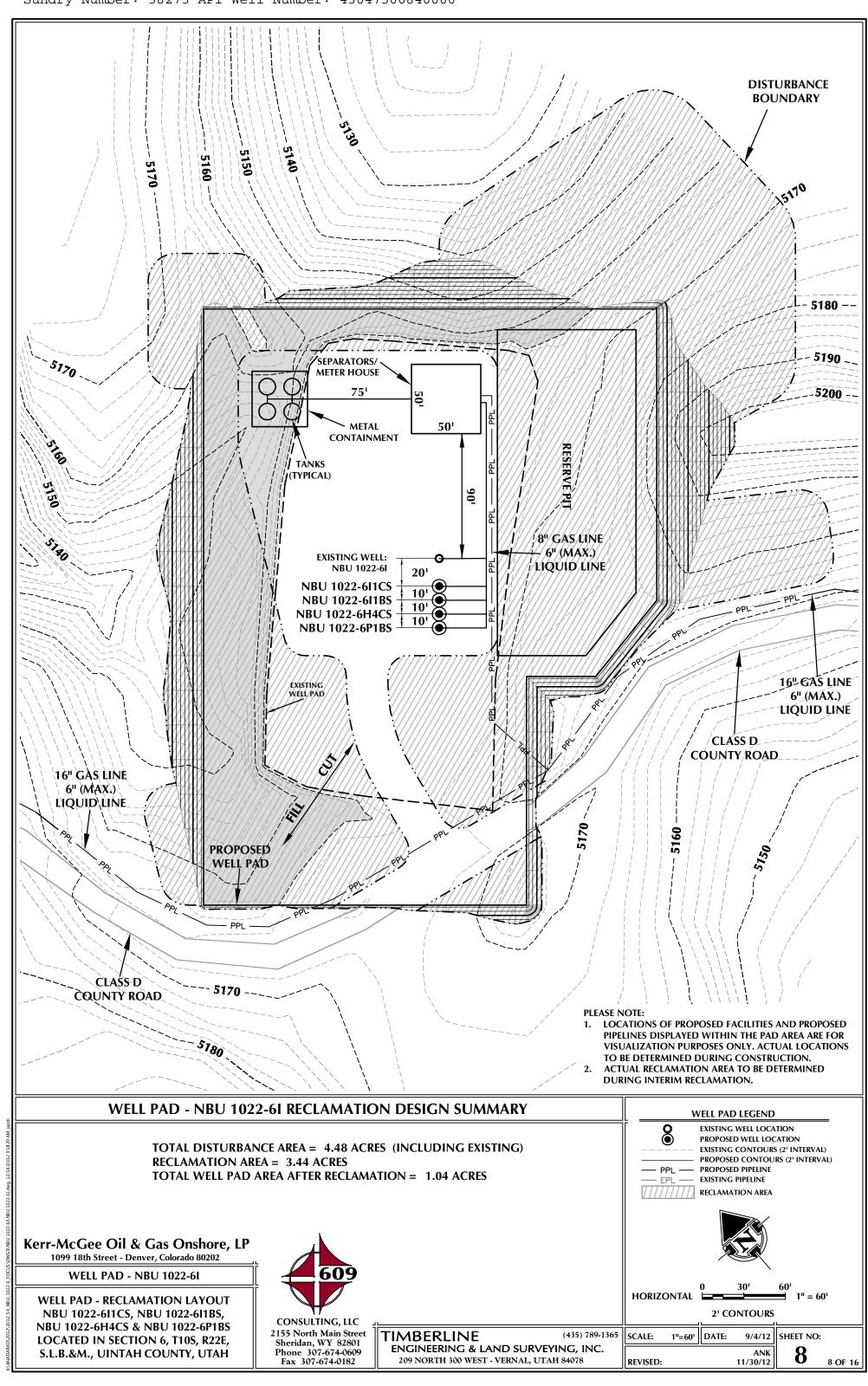
Date Last Revised:

SURFACE POSITION							BOTTOM HOLE				
WELL NAME	NAD	D83	NAE	27		NAE	083	NAD			
NIDI	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	FOOTAGES	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	FOOTAGES	
NBU 1022-611CS	39°58'31.553" 39.975431°	109°28'29.203" 109.474779°	39°58'31.678" 39.975466°	109°28'26.738" 109.474094°	1716' FSL 457' FEL	39°58'35.233" 39.976454°	109°28'29.193" 109.474776°	39°58'35.358" 39.976488°	109°28'26.727" 109.474091°	2088' FSL 452' FEL	
NBU	39°58'31.478"	109°28'29.286"	39°58'31.603"	109°28'26.821"	1708' FSL	39°58'39.145"	109°28'29.232"	39°58'39.270"	109°28'26.767"	2484' FSL	
1022-611BS NBU	39.975410° 39°58'31.403"	109.474802° 109°28'29.370"	39.975445° 39°58'31.528"	109.474117° 109°28'26.905"	463 FEL 1700 FSL	39.977540° 39°58'42.764"	109.474787° 109°28'29.345"	39.977575° 39°58'42.889"	109.474102° 109°28'26.879"	451' FEL 2444' FNL	
1022-6H4CS	39.975390°	109.474825°	39.975424°	109.474140°	470' FEL	39.978545°	109.474818°	39.978580°	109.474133°	456' FEL	
NBU 1022-6P1BS	39°58'31.328" 39.975369°	109°28'29.453" 109.474848°	39°58'31.453" 39.975404°	109°28'26.988" 109.474163°	1693' FSL 476' FEL	39°58'27.570" 39.974325°	109°28'30.593" 109.475165°	39°58'27.695" 39.974360°	109°28'28.128" 109.474480°	1313' FSL 569' FEL	
NBU	39°58'31.703"	109°28'29.036"	39°58'31.828"	109°28'26.571"	1731' FSL		1.000100			, JUJ 1 LL	
1022-61	39.975473°	109.474732°	39.975508°	109.474048° COORDINATES -	443' FEL	Position to Pour	om Hele				
WELL NAME	NORTH	EAST WE		ORTH EAS		NAME NOR		WELL NAM	E NORTH	EAST	
NBU	372.4	O 91 NBU	U 7	76.1' 4.3	NBU	1140		NBU	-380 41	-88.81	
1022-6I1CS		102	2-611BS		1022-6	6H4CS		1022-6P1BS			
THE S S.L.B.& GLOB	e ¼ of Sectio &m. Which Is Al Positioni	S IS THE EAST ION 6, T10S, R2: S TAKEN FROM ING SATELLITE D BEAR NOO°3	2E, ∕I E	$ \begin{array}{c} Az = 193.14028^{\circ} \\ \hline$	(To Bottom Hole)	N00°0/`51"E - 3/2.43' N00°0/`51"E - 3/2.43' (To Bottom Hole) AZ=0.13083° 0,00	Tom Hole) 4"E - 776.08 A to Chist, N. H. S to Chist, N. H. S to Chist, N. H. A to Chist, N. H. A to Chist, N. H. To Cha	7. 64 1. 40.5.24 7.2. 30.0. 10.5.39.2. 40.0. 10.5.39.2. 40.0. 10.5.39.2. 40.0. 10.5.39.2. 40.0. 10.5.		7 ,09	
		k Gas Ons	,	,		_ا		SC	CALE		
WE	LL PAD -	NBU 1022	2-61		609		MBERL		, ,	35) 789-1365	
\A/EIII	PAD INTE	RFERENCE	PIAT			E		IG & LAND : 300 west - ver			
		TEKENCI 1CS, NBU 10		CONS	ULTING, LL	C DAT	SURVEYED:		•	SHEET NO:	
		& NBU 1022			orth Main Stre	8-9-1	2	SURVEYED B	Y: W.W.	STILET NO:	
		ION 6, T10S		Sherid	an WY 8280	$\begin{vmatrix} \begin{vmatrix} DAII \\ 8-22 \end{vmatrix}$	E DRAWN: -12	DRAWN BY:	T.J.R.	5	
		i COUNTY,			307-674-060 07-674-0182	9	CALE: 1" = 60'	Date Last Rev	vised:	5 OF 16	
		<u> </u>		I da J	01-017-0102					1 0 01 10	









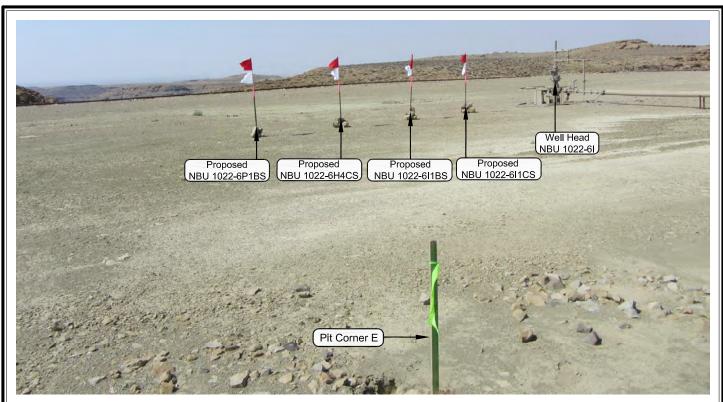


PHOTO VIEW: FROM PIT CORNER E TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: NORTHWESTERLY

Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-61

LOCATION PHOTOS NBU 1022-611CS, NBU 1022-611BS, NBU 1022-6H4CS & NBU 1022-6P1BS LOCATED IN SECTION 6, T10S, R22E, S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC 2155 North Main Street Sheridan WY 82801 Phone 307-674-0609

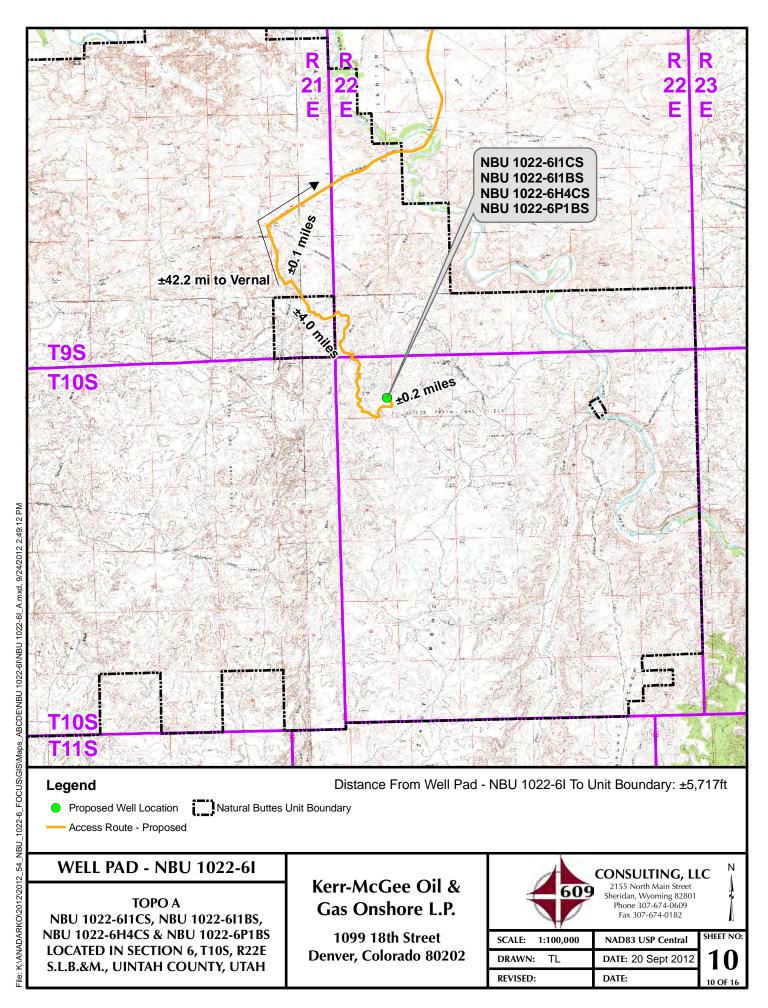
Fax 307-674-0182

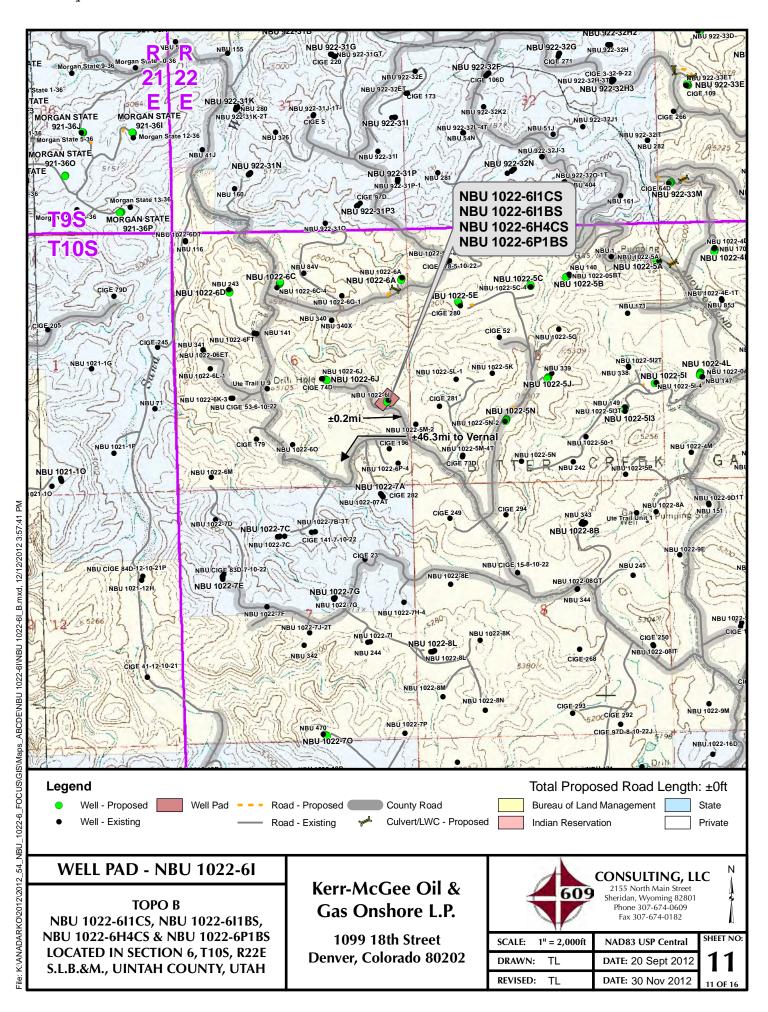
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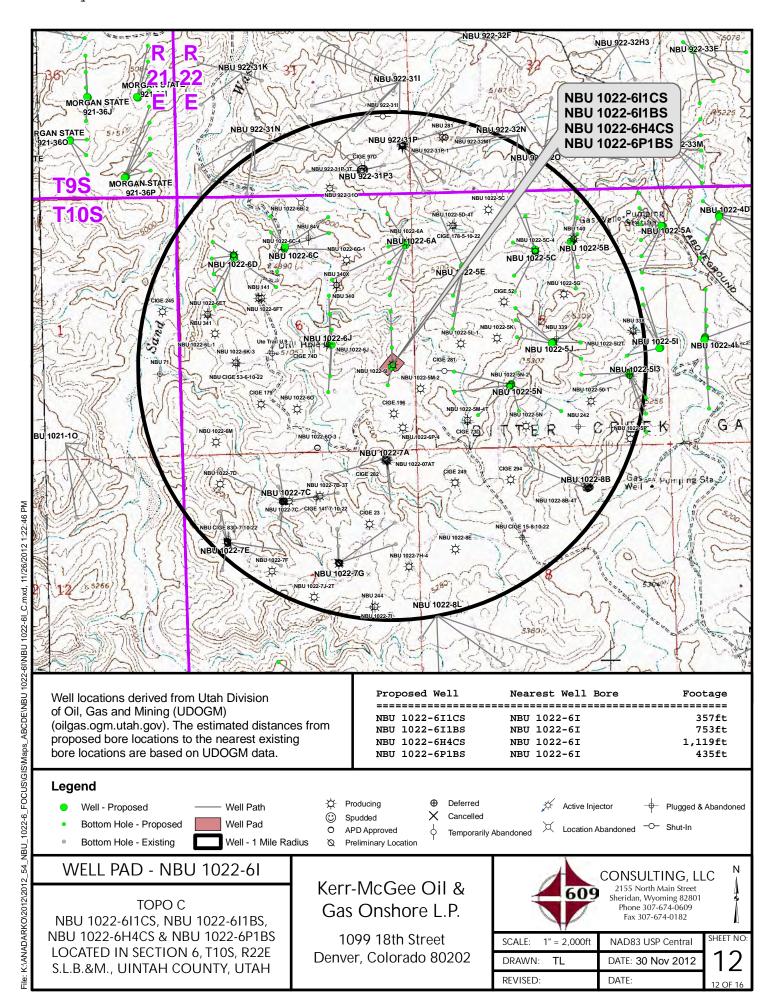
TIMBERLIN	(435) 789-1365		
engineering	& LAND SURVEYING	G, INC.	
209 NORTH 300	WEST - VERNAL, UTAH 84	1078	
DATE PHOTOS TAKEN: 8-9-12	PHOTOS TAKEN BY: W.W.	SHEET NO:	
DATE DRAWN:	DRAWN BY: T.J.R.	Q	

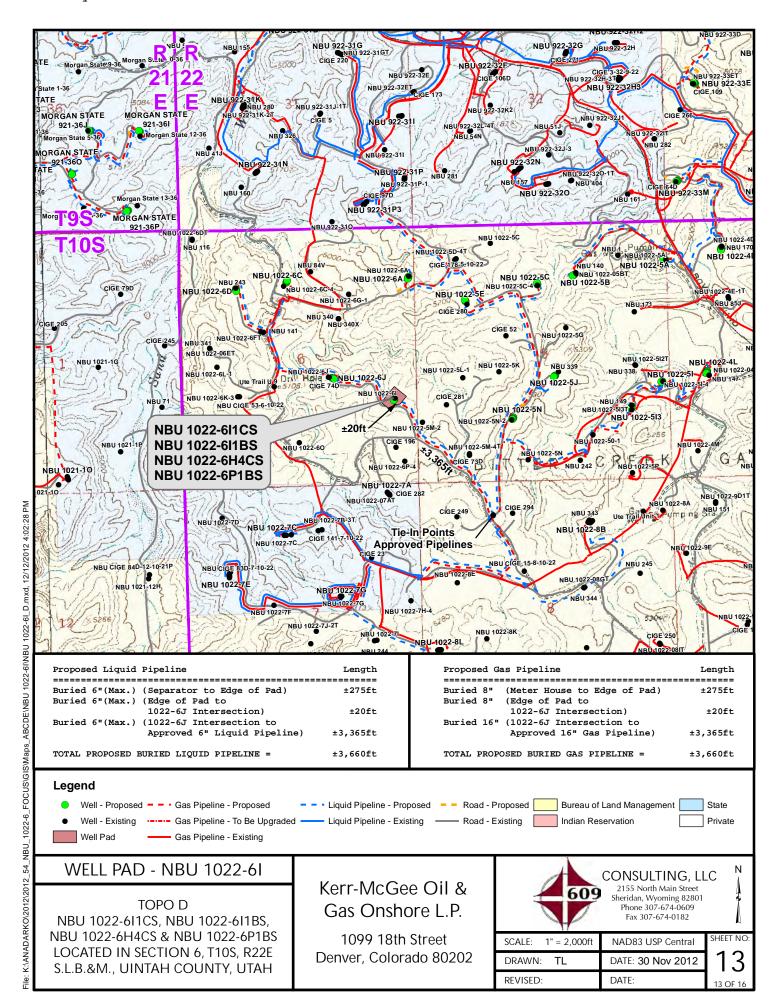
RECEIVED: May. 29, 2013

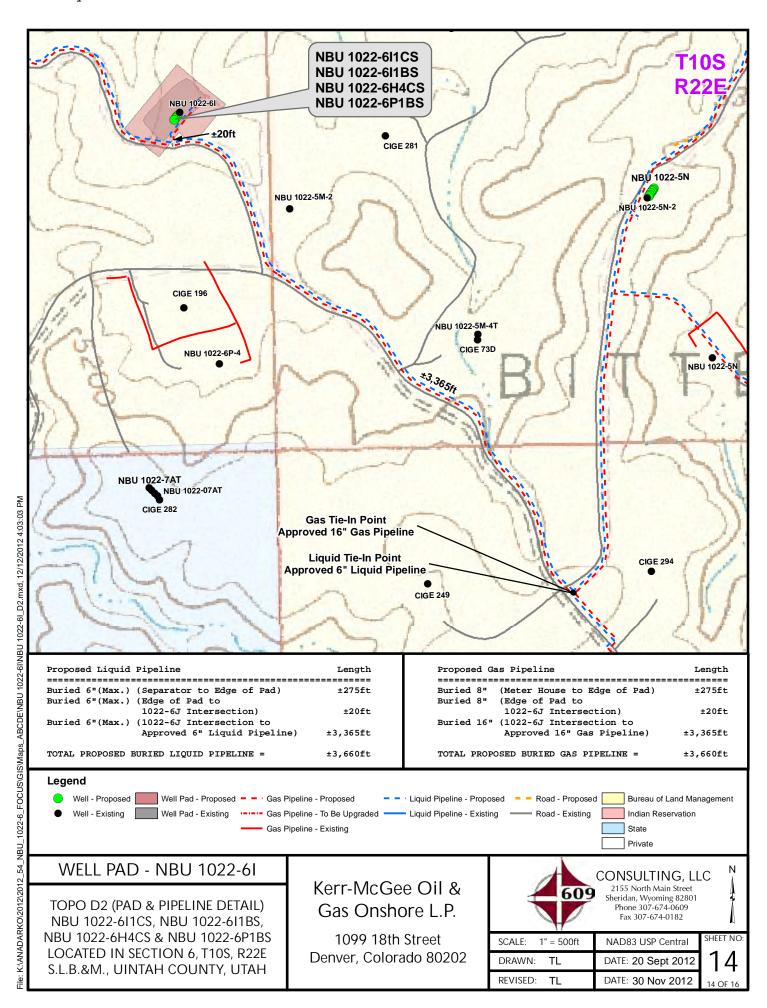
9 OF 16











Sundry Number: 38273 API Well Number: 43047506840000 NBU 922-310 NBU 922-32H3 UT ST UO 01530-A ST UT ML 22265 NBU 922-31K NBU 922-31 MORGAN STATE 921-36J GAN STATE 921-360 UT ST UO 1207-A ST **NBU 1022-6I1CS** NBU 922-31P3 MORGAN STATE 921-36P **NBU 1022-6I1BS NBU 1022-6H4CS** NBU 1022-4D USA UTU 0464 **NBU 1022-6P1BS** USA UTU 01195-E NBU 1022 NBU-1022-6A NBU 1022-5B NBU 1022-6C NBU 1022-5C NBU 1022-6D USA UTU 01191-A USA UTU 01195 Dr. H.D. 1022-6J NBU 1022-51 NBU 1022-4L USA UTU 01191-A NBU 1022-5J NBU 1022-5N BU 1021-10 NBU 1022-7A NBU 1022-70 USA UTU 01196-C **USA UTU 0466** ST UT ML 23609 USA UTU 01 NBU 1022-8L UTU 0149081 USA UTU 01196-A **USA UTU 0466** Distance To Proposed Well Nearest Lease Boundary _____ NBU 1022-611CS 452ft NBU 1022-611BS 451ft NBU 1022-70 NBU 1022-6H4CS 508ft NBU 1022-6P1BS 569ft Legend Well - Proposed Well Pad Gas Pipeline - Proposed Liquid Pipeline - Proposed - Road - Proposed Bureau of Land Management Bottom Hole - Proposed Lease Boundary Gas Pipeline - To Be Upgraded Liquid Pipeline - Existing Indian Reservation Bottom Hole - Existing Gas Pipeline - Existing State Private **WELL PAD - NBU 1022-61** CONSULTING, LLC Kerr-McGee Oil & 2155 North Main Street 609 Sheridan, Wyoming 82801 **TOPO E** Phone 307-674-0609 Gas Onshore L.P. Fax 307-674-0182 NBU 1022-611CS, NBU 1022-611BS,

NBU 1022-6H4CS & NBU 1022-6P1BS 1099 18th Street SHEET NO: NAD83 USP Central SCALE: 1'' = 2,000 ft**LOCATED IN SECTION 6, T10S, R22E** Denver, Colorado 80202 DRAWN: TL **DATE: 30 Nov 2012** S.L.B.&M., UINTAH COUNTY, UTAH REVISED: DATE: 15 OF 16 RECEIVED: May. 29, 2013

1022-6I\NBU 1022-6I

FOCUS\GIS\Maps

K:\ANADARKO\2012\2012_54_

Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 1022-6I WELLS - NBU 1022-6I1CS, NBU 1022-6I1BS, NBU 1022-6H4CS & NBU 1022-6P1BS Section 6, T10S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 0.1 miles to a second Class D County Road to the southeast. Exit right and proceed in a southeasterly direction along the second Class D County Road approximately 4.0 miles to a third Class D County Road to the northwest. Exit left and proceed in a northwesterly direction along the third Class D County Road approximately 0.2 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 46.5 miles in a southerly direction.

SHEET 16 OF 16

Sundry Number: 38273 AProjecte LUTAN undital (feet) 4 0 AD27,52068 1200000



-750

1500

Vertical Section at 193.15° (1500 ft/in)

2250

3750

Site: NBU 1022-61 PAD Well: NBU 1022-6P1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

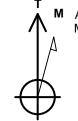


Plan: PLAN #1 PRELIMINARY (NBU 1022-6P1BS/OH)

Date: 10:31, January 16 2013

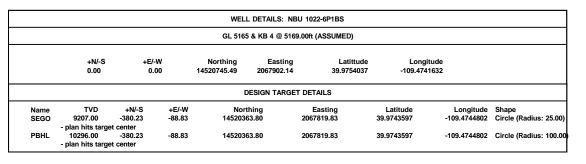
Created By: RobertScott

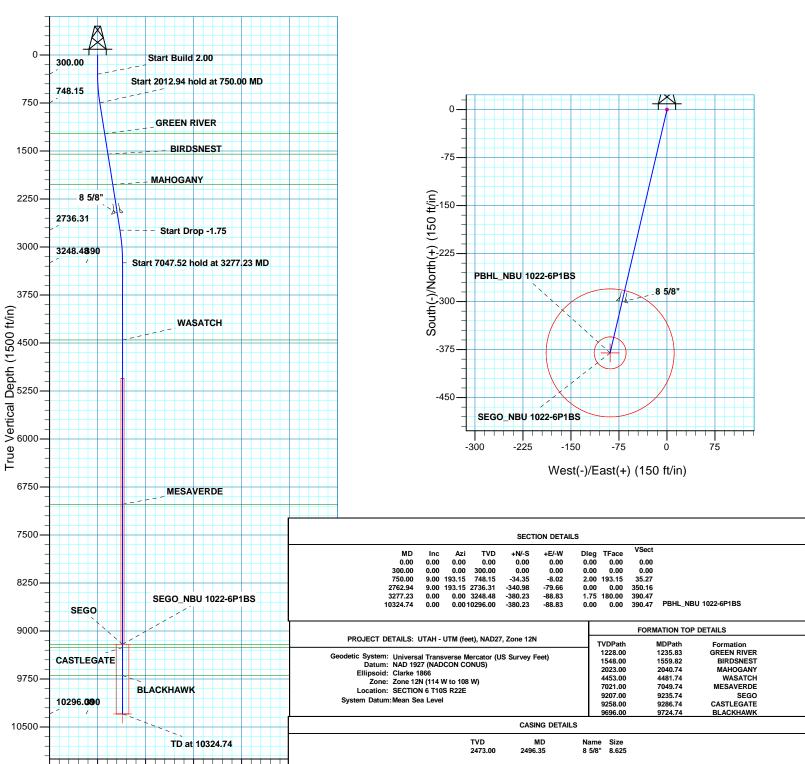
REC



Azimuths to True North Magnetic North: 10.86°

Magnetic Field Strength: 52159.7snT Dip Angle: 65.81° Date: 2013/01/16 Model: IGRF2010







US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N NBU 1022-6I PAD NBU 1022-6P1BS

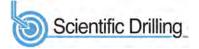
OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

16 January, 2013





SDI Planning Report



Database: EDM5000-RobertS-Local

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-6I PAD

 Well:
 NBU 1022-6P1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Reference: GL 5165 & KB 4 @ 5169.00ft (ASSUMED)

True

Minimum Curvature

Well NBU 1022-6P1BS

GL 5165 & KB 4 @ 5169.00ft (ASSUMED)

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System: Universal Transverse Mercator (US Survey Feet)

Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: Zone 12N (114 W to 108 W)

System Datum: Mean Sea Level

.....

Site NBU 1022-6I PAD, SECTION 6 T10S R22E

Northing: 14,520,753.26 usft Site Position: Latitude: 39.9754247 From: Lat/Long Easting: 2,067,908.45 usft Longitude: -109.4741402 **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.98 13.200 in

Well NBU 1022-6P1BS, 1693 FSL 476 FEL

 Well Position
 +N/-S
 -7.65 ft
 Northing:
 14,520,745.50 usft
 Latitude:
 39.9754037

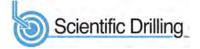
 +E/-W
 -6.45 ft
 Easting:
 2,067,902.14 usft
 Longitude:
 -109.4741632

Position Uncertainty 0.00 ft Wellhead Elevation: Ground Level: 5,165.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) IGRF2010 2013/01/16 10.86 65.81 52,160

PLAN #1 PRELIMINARY Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 193.15

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
750.00	9.00	193.15	748.15	-34.35	-8.02	2.00	2.00	0.00	193.15	
2,762.94	9.00	193.15	2,736.31	-340.98	-79.66	0.00	0.00	0.00	0.00	
3,277.23	0.00	0.00	3,248.48	-380.23	-88.83	1.75	-1.75	0.00	180.00	
10,324.74	0.00	0.00	10,296.00	-380.23	-88.83	0.00	0.00	0.00	0.00 F	BHL_NBU 1022-6P



SDIPlanning Report



Database: Company: EDM5000-RobertS-Local

US ROCKIES REGION PLANNING

Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-6I PAD

 Well:
 NBU 1022-6P1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-6P1BS

GL 5165 & KB 4 @ 5169.00ft (ASSUMED) GL 5165 & KB 4 @ 5169.00ft (ASSUMED)

True

Minimum Curvature

ign:	PLAN #1 PRE	LIMINART							
nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00 100.00 200.00 300.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 100.00 200.00 300.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
Start Build 2									
400.00 500.00 600.00 700.00	2.00 4.00 6.00 8.00	193.15 193.15 193.15 193.15	399.98 499.84 599.45 698.70	-1.70 -6.80 -15.28 -27.15	-0.40 -1.59 -3.57 -6.34	1.75 6.98 15.69 27.88	2.00 2.00 2.00 2.00	2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00
750.00	9.00	193.15	748.15	-34.35	-8.02	35.27	2.00	2.00	0.00
Start 2012.9 800.00	4 hold at 750.00 9.00	MD 193.15	797.54	-41.96	-9.80	43.09	0.00	0.00	0.00
900.00 1,000.00 1,100.00 1,200.00 1,235.83	9.00 9.00 9.00 9.00 9.00	193.15 193.15 193.15 193.15 193.15	896.31 995.07 1,093.84 1,192.61 1,228.00	-57.20 -72.43 -87.66 -102.90 -108.35	-13.36 -16.92 -20.48 -24.04 -25.31	58.74 74.38 90.02 105.67 111.27	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
GREEN RIV	ER								
1,300.00 1,400.00 1,500.00 1,559.82	9.00 9.00 9.00 9.00	193.15 193.15 193.15 193.15	1,291.38 1,390.15 1,488.92 1,548.00	-118.13 -133.36 -148.59 -157.71	-27.60 -31.16 -34.71 -36.84	121.31 136.95 152.60 161.95	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
BIRDSNEST			1,010.00	.0	00.01	.000	0.00	0.00	0.00
1,600.00	9.00	193.15	1,587.69	-163.83	-38.27	168.24	0.00	0.00	0.00
1,700.00 1,800.00 1,900.00 2,000.00 2,040.74	9.00 9.00 9.00 9.00 9.00	193.15 193.15 193.15 193.15 193.15	1,686.46 1,785.22 1,883.99 1,982.76 2,023.00	-179.06 -194.29 -209.53 -224.76 -230.97	-41.83 -45.39 -48.95 -52.51 -53.96	183.88 199.53 215.17 230.81 237.19	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
MAHOGAN	1		,						
2,100.00 2,200.00 2,300.00 2,400.00 2,496.35	9.00 9.00 9.00 9.00 9.00	193.15 193.15 193.15 193.15 193.15	2,081.53 2,180.30 2,279.07 2,377.84 2,473.00	-239.99 -255.23 -270.46 -285.69 -300.37	-56.07 -59.63 -63.19 -66.74 -70.17	246.46 262.10 277.74 293.39 308.46	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,500.00 2,600.00 2,700.00 2,762.94	9.00 9.00 9.00 9.00	193.15 193.15 193.15 193.15	2,476.61 2,575.38 2,674.14 2,736.31	-300.93 -316.16 -331.39 -340.98	-70.30 -73.86 -77.42 -79.66	309.03 324.67 340.32 350.16	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
Start Drop -									
2,800.00	8.35	193.15	2,772.94	-346.43	-80.93	355.75	1.75	-1.75	0.00
2,900.00 3,000.00 3,100.00 3,200.00 3,277.23	6.60 4.85 3.10 1.35 0.00	193.15 193.15 193.15 193.15 0.00	2,872.09 2,971.59 3,071.34 3,171.26 3,248.48	-359.10 -368.81 -375.56 -379.35 -380.23	-83.89 -86.16 -87.74 -88.62 -88.83	368.77 378.74 385.68 389.56 390.47	1.75 1.75 1.75 1.75 1.75	-1.75 -1.75 -1.75 -1.75 -1.75	0.00 0.00 0.00 0.00 0.00
Start 7047.5	2 hold at 3277.23	3 MD							
3,300.00 3,400.00 3,500.00 3,600.00 3,700.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	3,271.26 3,371.26 3,471.26 3,571.26 3,671.26	-380.23 -380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83 -88.83	390.47 390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00



SDIPlanning Report



Database: EDM500 Company: US ROO

EDM5000-RobertS-Local

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-6I PAD

 Well:
 NBU 1022-6P1BS

Wellbore: OH

Project:

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

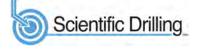
Well NBU 1022-6P1BS

GL 5165 & KB 4 @ 5169.00ft (ASSUMED) GL 5165 & KB 4 @ 5169.00ft (ASSUMED)

True

Minimum Curvature

Design:	FLAN#1FRE								
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,800.00 3,900.00 4,000.00 4,100.00 4,200.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	3,771.26 3,871.26 3,971.26 4,071.26 4,171.26	-380.23 -380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83 -88.83 -88.83	390.47 390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,300.00 4,400.00 4,481.74	0.00 0.00 0.00	0.00 0.00 0.00	4,271.26 4,371.26 4,453.00	-380.23 -380.23 -380.23	-88.83 -88.83 -88.83	390.47 390.47 390.47	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
WASATCH 4,500.00 4,600.00	0.00 0.00	0.00 0.00	4,471.26 4,571.26	-380.23 -380.23	-88.83 -88.83	390.47 390.47	0.00 0.00	0.00 0.00	0.00 0.00
4,700.00 4,800.00 4,900.00 5,000.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	4,671.26 4,771.26 4,871.26 4,971.26	-380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83	390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
5,100.00 5,200.00 5,300.00 5,400.00 5,500.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	5,071.26 5,171.26 5,271.26 5,371.26 5,471.26	-380.23 -380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83 -88.83	390.47 390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
5,600.00 5,700.00 5,800.00	0.00 0.00 0.00	0.00 0.00 0.00	5,571.26 5,671.26 5,771.26	-380.23 -380.23 -380.23	-88.83 -88.83 -88.83	390.47 390.47 390.47	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
5,900.00 6,000.00 6,100.00 6,200.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	5,871.26 5,971.26 6,071.26 6,171.26	-380.23 -380.23 -380.23	-88.83 -88.83 -88.83	390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
6,300.00 6,400.00 6,500.00 6,600.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	6,271.26 6,371.26 6,471.26 6,571.26	-380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83 -88.83	390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
6,700.00 6,800.00 6,900.00 7,000.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	6,671.26 6,771.26 6,871.26 6,971.26	-380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83	390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
7,049.74 MESAVERDE	0.00	0.00	7,021.00	-380.23	-88.83	390.47	0.00	0.00	0.00
7,100.00 7,200.00 7,300.00 7,400.00 7,500.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	7,071.26 7,171.26 7,271.26 7,371.26 7,471.26	-380.23 -380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83 -88.83	390.47 390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
7,600.00 7,700.00 7,800.00 7,900.00 8,000.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	7,571.26 7,671.26 7,771.26 7,871.26 7,971.26	-380.23 -380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83 -88.83	390.47 390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8,100.00 8,200.00 8,300.00 8,400.00 8,500.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	8,071.26 8,171.26 8,271.26 8,371.26 8,471.26	-380.23 -380.23 -380.23 -380.23 -380.23	-88.83 -88.83 -88.83 -88.83	390.47 390.47 390.47 390.47 390.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8,600.00 8,700.00	0.00 0.00	0.00 0.00	8,571.26 8,671.26	-380.23 -380.23	-88.83 -88.83	390.47 390.47	0.00 0.00	0.00 0.00	0.00 0.00



SDI Planning Report



Database: Company: Project:

EDM5000-RobertS-Local

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-6I PAD Site: Well: NBU 1022-6P1BS

Wellbore: ОН

Design: PLAN #1 PRELIMINARY Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 1022-6P1BS

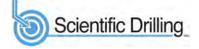
GL 5165 & KB 4 @ 5169.00ft (ASSUMED) GL 5165 & KB 4 @ 5169.00ft (ASSUMED)

Minimum Curvature

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
8,800.00	0.00	0.00	8,771.26	-380.23	-88.83	390.47	0.00	0.00	0.00
8,900.00	0.00	0.00	8,871.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,000.00	0.00	0.00	8,971.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,100.00	0.00	0.00	9,071.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,200.00	0.00	0.00	9,171.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,235.74	0.00	0.00	9,207.00	-380.23	-88.83	390.47	0.00	0.00	0.00
	O_NBU 1022-6P								
9,286.74	0.00	0.00	9,258.00	-380.23	-88.83	390.47	0.00	0.00	0.00
CASTLEGAT									
9,300.00	0.00	0.00	9,271.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,400.00	0.00	0.00	9,371.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,500.00	0.00	0.00	9,471.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,600.00	0.00	0.00	9,571.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,700.00	0.00	0.00	9,671.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,724.74	0.00	0.00	9,696.00	-380.23	-88.83	390.47	0.00	0.00	0.00
BLACKHAW	K								
9,800.00	0.00	0.00	9,771.26	-380.23	-88.83	390.47	0.00	0.00	0.00
9,900.00	0.00	0.00	9,871.26	-380.23	-88.83	390.47	0.00	0.00	0.00
10,000.00	0.00	0.00	9,971.26	-380.23	-88.83	390.47	0.00	0.00	0.00
10,100.00	0.00	0.00	10,071.26	-380.23	-88.83	390.47	0.00	0.00	0.00
10,200.00	0.00	0.00	10,171.26	-380.23	-88.83	390.47	0.00	0.00	0.00
10,300.00	0.00	0.00	10,271.26	-380.23	-88.83	390.47	0.00	0.00	0.00
10,324.74	0.00	0.00	10,296.00	-380.23	-88.83	390.47	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SEGO_NBU 1022-6P1B - plan hits target cent - Circle (radius 25.00)		0.00	9,207.00	-380.23	-88.83	14,520,363.80	2,067,819.82	39.9743597	-109.4744802
PBHL_NBU 1022-6P1B: - plan hits target cent - Circle (radius 100.0		0.00	10,296.00	-380.23	-88.83	14,520,363.80	2,067,819.82	39.9743597	-109.4744802

Casing Points					
	Measured	Vertical		Casing	Hole
	Depth	Depth		Diameter	Diameter
	(ft)	(ft)	Name	(in)	(in)
	2,496.35	2,473.00	8 5/8"	8.625	11.000



SDIPlanning Report



Database: Company: EDM5000-RobertS-Local

US ROCKIES REGION PLANNING

 Project:
 UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-6I PAD

 Site:
 NBU 1022-6I PAD

 Well:
 NBU 1022-6P1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 1022-6P1BS

GL 5165 & KB 4 @ 5169.00ft (ASSUMED) GL 5165 & KB 4 @ 5169.00ft (ASSUMED)

True

Minimum Curvature

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,235.83	1,228.00	GREEN RIVER				
	1,559.82	1,548.00	BIRDSNEST				
	2,040.74	2,023.00	MAHOGANY				
	4,481.74	4,453.00	WASATCH				
	7,049.74	7,021.00	MESAVERDE				
	9,235.74	9,207.00	SEGO				
	9,286.74	9,258.00	CASTLEGATE				
	9,724.74	9,696.00	BLACKHAWK				

Plan Annotations								
Measured	Vertical	Local Coor	dinates					
Depth	Depth	+N/-S	+E/-W					
(ft)	(ft)	(ft)	(ft)	Comment				
300.00	300.00	0.00	0.00	Start Build 2.00				
750.00	748.15	-34.35	-8.02	Start 2012.94 hold at 750.00 MD				
2,762.94	2,736.31	-340.98	-79.66	Start Drop -1.75				
3,277.23	3,248.48	-380.23	-88.83	Start 7047.52 hold at 3277.23 MD				
10,324.74	10,296.00	-380.23	-88.83	TD at 10324.74				

Surface Use Plan of Operations

NBU 1022-6H4CS/ 1022-6I1BS/ 1022-6I1CS/ 1022-6P1BS

1 of 6

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-61 PAD

<u>API #</u>	<u>1</u>	NBU 1022-6H4CS	_
	Surface:	1700 FSL / 470 FEL	NESE
	BHL:	2444 FNL / 456 FEL	SENE
<u>API #</u>	1	NBU 1022-6I1BS	_
	Surface:	1708 FSL / 463 FEL	NESE
	BHL:	2484 FSL / 451 FEL	NESE
<u>API #</u>	<u>1</u>	NBU 1022-6I1CS	
<u>API #</u>	Surface:	NBU 1022-6I1CS 1716 FSL / 457 FEL	NESE
<u>API #</u>	_		NESE NESE
<u>API #</u> <u>API #4304750684</u>	Surface: BHL:	1716 FSL / 457 FEL	
	Surface: BHL:	1716 FSL / 457 FEL 2088 FSL / 452 FEL	

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on October 10, 2012. Present were:

- · Dave Gordon, Melissa Wardle, Aaron Roe and Lynn Dehner BLM
- · Jacob Dunham and Mitch Batty 609 Consulting, LLC and Timberline Engineering & Land Surveying, Inc.
- · Alan Rabinoff- ICF International
- · Gina Becker, Tony Kazeck, Casey McKee, Charles Chase and Robert Townley- Kerr-McGee

A. Existing Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Topo B for existing roads.

B. New or Reconstructed Access Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

There are no new or road re-routes planned for this pad.

NBU 1022-6H4CS/ 1022-6I1BS/ 1022-6I1CS/ 1022-6P1BS

Surface Use Plan of Operations 2 of 6

C. Location of Existing Wells:

Please refer to Topo C for exiting wells.

D. Location of Existing and/or Proposed Facilities:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

This pad will expand the existing pad for the NBU 1022-6I, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on January 17, 2013. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

GAS GATHERING

Please refer to Exhibit A and Topo D2- Pad and Pipeline Detail.

The total gas gathering pipeline distance from the meter to the tie in point is $\pm 3,660$ ' and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- ±275' (0.05 miles) Section 6 T10S R22E (NE/4 SE/4) On-lease UTU-464, BLM surface, New 8" buried gas gathering pipeline from the meter to the edge of the pad. Please refer to Topo D2 Pad and Pipeline Detail.
- ±20' (0.004 miles) Section 6 T10S R22E (NE/4 SE/4) On-lease UTU-464, BLM surface, New 8" buried gas gathering pipeline from the edge of the pad traveling south to tie-in to the proposed new 16" buried gas gathering pipeline at the NBU 1022-6J Pad intersection. Please refer to Exhibit A, Line 10.
- ±3,365' (0.6 miles) Section 6 T10S R22E (NE/4 SE/4) On-lease UTU-01195, UTU-01191-A & UTU-466, BLM surface, New 16" buried gas gathering pipeline from the NBU 1022-6J intersection traveling southeast to the tie-in point at the approved 16" buried gas gathering pipeline in the NE/4 NW/4, Section 8, T10S-R22E. This pipeline runs concurrently with the NBU 1022-6C, 1022-6D and 1022-6J Pads. Please refer to Exhibit A, Line 1.

LIQUID GATHERING

Please refer to Exhibit B and Topo D2- Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 3,660$ ' and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

±275' (0.05 miles) – Section 6 T10S R22E (NE/4 SE/4) – On-lease UTU-464, BLM surface, New 6" buried liquid gathering pipeline from the separator to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

NBU 1022-6H4CS/ 1022-6I1BS/ 1022-6I1CS/ 1022-6P1BS

Surface Use Plan of Operations 3 of 6

±20' (0.004 miles) – Section 6 T10S R22E (NE/4 SE/4) – On-lease UTU-464, BLM surface, New 6' buried liquid gathering pipeline from the edge of the pad traveling south to tie-in to the proposed new 6" buried liquid gathering pipeline at the NBU 1022-6J Pad intersection. Please refer to Exhibit B, Line 10.

±3,365' (0.6 miles) – Section 6 T10S R22E (NE/4 SE/4) – On-lease UTU-01195, UTU-01191-A & UTU-466, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-6J intersection traveling southeast to the tie-in point at the approved 6" buried liquid gathering pipeline in the NE/4 NW/4, Section 8, T10S-R22E. This pipeline runs concurrently with the NBU 1022-6C, 1022-6D and 1022-6J Pads. Please refer to Exhibit B, Line 1.

Pipeline Gathering Construction

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

The Anadarko Completions Transportation System (ACTS) information:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Exhibit C for ACTS Lines

E. Location and Types of Water Supply:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Water will be hauled to location over the roads marked on Maps A and B.

F. Construction Materials:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

G. Methods for Handling Waste:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Materials Management

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

I. Well Site Layout:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

NBU 1022-6H4CS/ 1022-6I1BS/ 1022-6I1CS/ 1022-6P1BS

Surface Use Plan of Operations 4 of 6

J. Plans for Surface Reclamation:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Interim Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Measures Common to Interim and Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Weed Control

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Monitoring

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

K. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

L. Other Information:

Cultural and Paleontological Resources

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Resource Reports:

A Class I literature survey was completed on October 31, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 12-311.

A paleontological reconnaissance survey was completed on May 31, 2010 by IPC Block Survey. SWCA Environmental Consultants has prepared the survey report. For additional details please refer to report UT12-14314-207.

NBU 1022-6H4CS/ 1022-6I1BS/ 1022-6I1CS/ 1022-6P1BS

Surface Use Plan of Operations 5 of 6

Biological field survey was completed on October 16, 2012 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-861.

Proposed Action Annual Emissions Tables:

Please refer to the Appendix in the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

NBU 1022-6H4CS/ 1022-6I1BS/ 1022-6I1CS/ 1022-6P1BS

Surface Use Plan of Operations 6 of 6

M. Lessee's or Operators' Representative & Certification:

Gina T. Becker Senior Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6086 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Gina T.Becker

January 21, 2013

Date

Form 3160-3 (March 2012)

ECEIVED

JAN 29 2013

FORM APPROVED OMB NO. 1004-0137

Expires: October 31, 2014

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT. Vernal Uta

UTU-01195

5. Lease Serial No.

APPLICATION FOR PERMIT TO	DRILL OR REENTER	Uldil	If Indian, Allottee or I	Гribe Name A
		7	If Unit or CA Agreem	-
1a. Type of Work: X DRILL	REENTER		UTU63047A	0
1a. Type of Work: X DRILL			Lease Name and Well	
1b. Type of Well: Oil Well X Gas Well Other	Single Zone X Multiple Z		NBU 1022	
	Single Zone X With the Z			5-01 1B3
2. Name of Operator		9.	API Well No.	
KERR-MCGEE OIL & GAS	ONSHORE, L.P.		430475	0684
3a. Address	3b. Phone No. (include area code)	10.	Field and Pool, or Exp	oloratory
P.O. BOX 173779	PHONE 720-929-6086	ļ	NATURAL	DITTES
DENVER, COLORADO 80202-3779	FAX 720-929-7086			
4. Location of well (Report location clearly and In accordan	ce with any State requirements.*)	11.	Sec.,T.,R.,M.,or Blk.	and Survey or Are
At surface NESE Lot 1693 FSL 476 FEL L.	AT = 39.975369 LONG = -109.4	474848		
0 1093101 1701111 23	11 33.373303 2010 103.1	,,,,,,,	6 T 10S	R 22E
prod. Zone 0	AT = 39.974325 LONG = -109.4			
14. Distance in miles and direction from the nearest town or po	ost office*	12.	County or Parish	13. State
Approximately 47 miles southeas	t of Vernal, Utah		UINTAH	UT
15. Distance from proposed*	16. No. of acres in lease	17. Spacing	Unit dedicated to the	MACIVED.
location to negreet	1		K	ECEIVED
property or lease line, ft.	577.75		44.3	M 2 0 2012
(Also to nearest drlg. unit line, if any)		:	JU	N 2 0 2013
18. Distance from proposed location*	19. Proposed Depth	20. BLM/ B	IA Bond No. on file	a a a subling
to nearest well, drilling, completed, 435	10325 MD	ļ	DIV. OF	FOIL, GAS & MINING
applied for, on this lease, ft.	10296 TVD	ļ	WYB00029	1
21. Elevations (Show whether DF. RT, GR, etc.)	22. Approximate date work w	ill start*	Estimated duratio	n
5165 GR	8/1/2013		60-90	DAYS
	24. Attachments			
The following, completed in accordance with the requirements	of Onshore Oil and Gas Order No. 1 sh	all be attache	ed to this form:	
1. Well plat certified by a registered surveyor.	4. Bond to cover the	operations un	nless covered by existir	ng bond on file(see
2. A Drilling Plan.	item 20 above).			
3. A Surface Use Plan (if the location is on National Forest S	ystem Lands, the 5. Operator certificati	ion.		
SUPO shall be filed with the appropriate Forest Service Of	fice). 6. Such other site spe	ecific informa	tion and/ or plans as m	nay be required by the
	authorized officer.			
25. Signature	Name (Printed/ Typed) GI	NA T BECKI	ER Date	January 28, 2013
	[,-, -
Title SENIOR REGULATORY ANALYST				
Approved By (Signature)	Name (Printed/ Typed) Kenc	-ko	Date	N 1 2 2013
he Boucha	Jelly Kello	LNa		· · · · · · · · · · · · · · · · · · ·
Title Lands & Mineral Resources	Office VERNAL FIELD O	FFICE		
Application approval does not warrant or certify that the applicant	holds legal or equitable title to those rig	ghts in the sub	bject lease which would	entitle the applicant to
conduct operations thereon.			IS OF APPROVAL	
Conditions of approval, if any, are attached.	U	PIDITION	IO OL MERNOVAL	L WILMOLED

Kerr-McGee Oil & Gas Onshore, L.P. hereby certifies that it is authorized by the proper lease interest owners and responsible under the terms and conditions of the lease to conduct lease operation associated with this application.

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United



UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE** 170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

KERR MCGEE OIL & GAS ONSHORE

NBU 1022-6P1BS

API No: 43-047-50684 Location: Lease No:

Agreement:

NESE, Sec. 6, T10S, R22E

UTU-01195

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER:

(435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
 work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
 mitigation may be necessary for the discovered paleontologic material before construction can
 continue.
- Mitigation measures can be found in Appendix B, Table B-2, of the GNB ROD (BLM 2012b) under the following sections of the table:
 - o Air Quality
 - o Soils
 - o Vegetation: Sclerocactus wetlandicus
 - o Wildlife: Colorado River Fish

Where populations or individuals of Sclerocactus wetlandicus are located within 300 feet of the proposed edge of project ROWs, the following actions will be taken to minimize impacts:

- Silt fencing will be used to protect cacti that are within 300 feet and downslope or downwind of surface disturbance. Fencing is intended to prevent sedimentation or dust deposition and will be evaluated for effectiveness by a qualified botanist.
- A qualified botanist will be on site to monitor surface-disturbing activities when cacti are within 300 feet of any surface disturbance.
- Dust abatement (consisting of water only) will occur during construction where plants are closer than 300 feet from surface-disturbing activities.
- Cacti within 300 feet of proposed surface disturbance will be flagged immediately prior to surface-disturbing activities and flags will be removed immediately after surface-disturbing activities are completed. Leaving cacti flagged for as short a time as possible will minimize drawing attention to the cacti location and reduce potential for theft.
- o Pipelines will be sited to maximize distance from adjacent cacti locations.
- Project personnel associated with construction activities will be instructed to drive at a speed limit of 15 miles per hour on unpaved roads and remain in existing roadway ROWs at all times.

For permanent surface pipelines, KMG will adhere to existing cacti survey/buffer guidelines of 300 feet, or amended guidelines if developed by the BLM and USFWS. In areas where avoidance by 300 feet is not feasible and populations or individuals of *Sclerocactus wetlandicus* are within 50 feet of proposed project components, the following actions will be taken to minimize impacts:

Page 3 of 8 Well: NBU 1022-6PIBS 6/3/2013

- Prior to construction, flag individual cactus. Once pipe installation is complete, remove the flagging.
- Prior to construction, install protective fencing around the cacti if they are down gradient of the surface pipe. Once pipe installation is complete, remove the protective fencing.
- A qualified botanist will be present during construction to monitor surface line installation.

The following considerations are required for those wells where KMG deems completion fluid recycling is appropriate based on new well density and topography:

- Temporary lines associated with recycling of completion water will be sited in existing ROWs. The pressure in the lines is less than 50 pounds per square inch and the lines are constructed of rigid aluminum; therefore, virtually no movement will occur during operation.
- If surface water completion lines are placed within the footprint of a road disturbance where vegetation does not grow, *Sclerocactus wetlandicus* surveys will not be necessary.
- A qualified botanist will survey a 50-foot-wide corridor along roads where temporary lines are planned to ensure *Sclerocactus wetlandicus* is not present.
- o If cacti are present within the 50-foot-wide survey corridor and avoidance is necessary (to ensure the line is more than 50 feet away from identified cactus), the new alignment will, if possible, be such that the cacti are topographically higher than the re-aligned line so a potential spill from the line will not impact the identified cacti.
- If it is not possible to re-align the surface lines to avoid individuals or populations of the Sclerocactus wetlandicus that are within 50 feet of surface disturbance, the following actions will be taken to minimize impacts:
- Prior to construction, KMG will flag individual cacti. Once pipe installation is complete, remove the flagging.
- Prior to construction, KMG will install protective fencing around the cacti if they are down gradient of the surface pipe. Once pipe installation is complete, remove the protective fencing.
- A qualified botanist will be present during construction to monitor surface line installation.

Avoidance of cactus by 300 feet will take priority in the expansion of pads within the cactus core conservation areas. When the 300-foot buffer cannot be avoided in pad expansion, KMG will notify the USFWS and work with the BLM to determine pad expansion that places a priority on avoiding cactus impacts.

KMG will follow existing ROWs and/or roads in constructing new buried pipelines within the cactus core conservation areas. For instance, where a new buried pipeline is unable to follow an existing ROW and/or road and exceeds 600 feet in length, KMG will work with the USFWS and the BLM to determine a route that places a priority on avoiding cactus impacts.

Maintenance activities on pipelines within cactus core conservation areas will avoid impacts to cactus, to the extent possible.

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established

Page 4 of 8 Well: NBU 1022-6PIBS 6/3/2013

- Noxious and invasive weeds will be controlled throughout the area of project disturbance.
- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an
 integrated pest management program is applicable, coordination has been undertaken with the
 state and local management program (if existing). A copy of the pest management plan will be
 submitted for each project.
- A pesticide use permit (PUP) will be obtained for the project, if applicable.
- Bird exclusion netting will be installed over reserve pits containing water that are left open for more than 30 days to reduce possibility of exposure to hazardous chemicals (BLM 2012b).
- KMG will install bird-excluding devises that prevent the perching and entry of migratory birds on or into its new fired vessel exhaust stacks (BLM 2012b).
- Tree removal within pinyon-juniper habitat will occur outside of the nesting season for migratory birds (approximately 4/1 to 7/31 (BLM 2012b).
- Damage to livestock and livestock facilities would be reported as quickly as possible to the BLM and affected livestock operators. Operators would develop and employ prevention measures to avoid damaging fences, gates, and cattleguards, including upgrading cattleguard gate widths and load-bearing requirements and fencing all open pits and cellars.
- If partial or complete removal of a fence cannot be avoided, the fence would be braced and tied off per the BLM guidance. Where the fence is crossed by a road, the fence would be braced and a cattleguard and gate installed per BLM guidance.
- On well pads 1022-6A, 1022-6C, 1022-6D, and segments of pipeline that intersect high fossil
 potential areas: Paleontological monitoring by a BLM permitted paleontologist is required during all
 ground-disturbing activities (BLM 2012b).

Page 5 of 8 Well: NBU 1022-6PIBS 6/3/2013

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Cement for the 4.5 inch casing shall be brought up to a minimum of 200 feet above the surface casing shoe.
- A CBL shall be run from TD to TOC in the Production Casing.
- Variances shall be granted as requested in Section 9 of the Drilling Program of the SOP.
- Gamma Ray Log shall be run from TD to the Surface.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
 encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
 Field Office.

Page 6 of 8 Well: NBU 1022-6PIBS 6/3/2013

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
 Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well by CD (compact disc).
 This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 7 of 8 Well: NBU 1022-6PIBS 6/3/2013

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
 notified when it is placed in a producing status. Such notification will be by written communication
 and must be received in this office by not later than the fifth business day following the date on
 which the well is placed on production. The notification shall provide, as a minimum, the following
 informational items:
 - Operator name, address, and telephone number.
 - o Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - o Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be
 reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported
 verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will
 be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of
 Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

Page 8 of 8 Well: NBU 1022-6PIBS 6/3/2013

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
 the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
 All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
 product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
 accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
 lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
 suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
 obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior approval
 of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
 approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
 of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

	STATE OF UTAH		FORM 9	
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195	
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
	oposals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-6P1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	9. API NUMBER: 43047506840000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 7 3779 720 929-	9. FIELD and POOL or WILDCAT: 65NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1693 FSL 0476 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 16 Township: 10.0S Range: 22.0E Meridi	ian: S	STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
9/1/2013	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION	
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL	
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION	
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
Kerr-McGee Oil & G an extension to this	COMPLETED OPERATIONS. Clearly show a Gas Onshore, L.P. (Kerr-McGe APD for the maximum time with any questions and/or co	ee) respectfully requests allowed. Please contact	Approved by the	
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMB 720 929-6236	ER TITLE Staff Regulatory Specialist		
SIGNATURE N/A		DATE 8/13/2013		



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506840000

API: 43047506840000 Well Name: NBU 1022-6P1BS

Location: 1693 FSL 0476 FEL QTR NESE SEC 06 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 9/1/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

g to a concession of come to more approximation, the concession of
• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of the proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? 🔘 Yes 🍺 No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? 📵 Yes 🔘 No
nature: Teena Paulo Date: 8/13/2013

Sig

Title: Staff Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 54304 API Well Number: 43047506840000

STATE OF UTAH				
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195	
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 1022-6P1BS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047506840000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PH n Street, Suite 600, Denver, CO, 80217 37	ONE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 110ATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1693 FSL 0476 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 22.0E Meridian: S			STATE: UTAH	
11. CHECH	K APPROPRIATE BOXES TO INDICATE I	NATURE OF NOTICE, REPOR	T, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
7	ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
9/2/2014	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION	
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL	
☐ DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION	
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
12 DESCRIBE PROPOSED OR		artinent details including dates d	lanthe valumes atc	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you. Approved by the Ukubukivision20f4 Oil, Gas and Mining				
			Date:	
			By: Daggill	
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist		
SIGNATURE	. 20 020 0200	DATE		
N/A		8/7/2014		

Sundry Number: 54304 API Well Number: 43047506840000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506840000

API: 43047506840000 Well Name: NBU 1022-6P1BS

Location: 1693 FSL 0476 FEL QTR NESE SEC 06 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 9/1/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? (Yes (No
• Has the approved source of water for drilling changed? Q Yes No
• Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? 📵 Yes 🔘 No
nature: Teena Paulo Date: 8/7/2014

Sig

Title: Staff Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

NEVEIVED

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

MAY 08 2015

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

5. Lease Serial No. UTU01195

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter abandoned well. Use form 3160-3 (APD) for such proposals	
Do not use this form for proposals to drill or to re-entered	$\mathbf{N}\mathbf{\Lambda}$
abandoned well. Use form 3160-3 (APD) for such propo bats —	IV:

abandoned we	II. Use form 3160-3 (AP	D) for such p	propo balsi —	IVs	6. If Indian, Allottee of	r Tribe Name
SUBMIT IN TRI	PLICATE - Other instruc	ctions on rev	verse side.		7. If Unit or CA/Agree UTU63047A	ement, Name and/or No.
1. Type of Well	ner .				8. Well Name and No. NBU 1022-6P1BS	
Oil Well ☑ Gas Well ☐ Other 2. Name of Operator Contact: JENNIFER T KERR MCGEE OIL & GAS ONSHOREE-Mail: JENNIFER.THOMAS@A			HOMAS NADARKO.CO	м	9. API Well No. 43-047-50684	
3a. Address	TOTAL Man. DETAIL E		o. (include area co		10. Field and Pool, or	Exploratory
P.O. BOX 173779 1099 18TH DENVER, CO 80217		Ph: 720-92			NATURAL BUT	TES
4. Location of Well (Footage, Sec., T.	., R., M., or Survey Description	1)			11. County or Parish, a	and State
Sec 6 T10S R22E Mer SLB		×			UINTAH COUNT	ry, ut
12. CHECK APPR	ROPRIATE BOX(ES) TO	O INDICATE	NATURE O	F NOTICE, RI	EPORT, OR OTHER	R DATA
TYPE OF SUBMISSION			ТҮРЕ	OF ACTION		
Notice of Intent	☐ Acidize	☐ Dee	pen	☐ Product	ion (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Frac	ture Treat	☐ Reclama	ation	■ Well Integrity
☐ Subsequent Report	Casing Repair	□ Nev	v Construction	□ Recomp	lete	Other
☐ Final Abandonment Notice	□ Change Plans	☐ Plug	g and Abandon	☐ Tempor	arily Abandon	Change to Original A PD
	☐ Convert to Injection	☐ Plug	g Back	☐ Water D	Pisposal	
Kerr-McGee Oil & Gas Onshol extension to this APD for the nundersigned with any question APD - 6/12/13 NEPA- 2013-179 E CONDITIONS OF AF	naximum time allowed. Pas and/or comments. Tha	lease contact	RECE JUN 1	EIVED 5 2015 AS & MINING	ENG. 4/2 GEOL E.S	FIELD OFFICE
14. I hereby certify that the foregoing is Name (Printed/Typed) JENNIFER	For KERR MCGE Committed to AFMSS for	E OIL & GAS	ONSHORE, se y JOHNETTA I	nt to the Vernal	2/2015 ()	
Signature (Electronic S	ubmission)		Date 05/08	/2015		
	THIS SPACE FO	OR FEDERA				
Approved By A	<u> </u>		Title Lan	ssistant Field Ids & Mineral	Manager Resources	JUN. 0 5 2015
Conditions of approved, if any, are attached ertify that the applicant heids legal or equivalent would entitle the applicant to conduction	itable title to those rights in the	not warrant or subject lease	Office	VERHAL P	TELD OFFICE	
Citle 18 U.S.C. Section 1001 and Title 43 U.States any false, fictitious or fraudulent s					ke to any department or a	ngency of the United

CONDITIONS OF APPROVAL

Kerr McGee Oil and Gas Onshore LP.

Notice of Intent APD Extension

Lease:

UTU-01195

Well:

NBU 1022-6P1BS

Location:

SESE Sec 6-T10S-R22E

An extension for the referenced APD is granted with the following conditions:

- 1. The extension and APD shall expire on 06/12/2017.
- 2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Robin L Hansen of this office at (435) 781-2777

Sundry Number: 65498 API Well Number: 43047506840000

			1	
	FORM 9			
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195	
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-6P1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047506840000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	h Street, Suite 600, Denver, CO, 8021	PHONE NUMBER: 7 3779 720 929-	9. FIELD and POOL or WILDCAT: 6 INATERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1693 FSL 0476 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 22.0E Meridian: S			STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
8/14/2015	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION	
Date of Work Completion:		PLUG AND ABANDON		
	OPERATOR CHANGE PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:				
Date of Sputt.	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON	
	L TUBING REPAIR	☐ VENT OR FLARE ☐	WATER DISPOSAL	
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION	
	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you. Approved by the Utabusivis70x20f5 Oil, Gas and Mining				
			Date:	
			By:	
			7/3	
NAME (PLEASE PRINT)	PHONE NUME	BER TITLE		
Jennifer Thomas	720 929-6808	Regulatory Specialist		
SIGNATURE N/A		DATE 8/14/2015		

Sundry Number: 65498 API Well Number: 43047506840000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506840000

API: 43047506840000 Well Name: NBU 1022-6P1BS

Location: 1693 FSL 0476 FEL QTR NESE SEC 06 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 9/1/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

	• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
	 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
	• Has there been any unit or other agreements put in place that could affect the permitting or operation of thi proposed well? Yes No
	• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
	• Has the approved source of water for drilling changed? Yes No
	• Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
	• Is bonding still in place, which covers this proposed well? Yes No
, ,	nature: Jennifer Thomas Date: 8/14/2015

Sig

Title: Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 74001 API Well Number: 43047506840000

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES				
ι	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01195			
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 1022-6P1BS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047506840000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PHO n Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 720 929-6	9. FIELD and POOL or WILDCAT: 458&TUERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1693 FSL 0476 FEL			COUNTY: UINTAH	
1693 FSL 0476 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 22.0E Meridian: S			STATE: UTAH	
11. CHECK	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	ALTER CASING	CASING REPAIR	
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
8/30/2016	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION	
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL	
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION	
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
12 DESCRIBE PROPOSED OR		ertinent details including dates, d	enths volumes etc	
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Date:				
			By: Daggill	
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE		
Joel Malefyt	720 929-6828	Regualtory Analyst		
SIGNATURE N/A		DATE 8/30/2016		

Sundry Number: 74001 API Well Number: 43047506840000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506840000

API: 43047506840000 Well Name: NBU 1022-6P1BS

Location: 1693 FSL 0476 FEL QTR NESE SEC 06 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 9/1/2009

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 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Joel Malefyt Date: 8/30/2016

Sig

Title: Regualtory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.